

**EXPLORING THE IMPACT OF NEGATIVE COMPARATIVE WORD-OF-
MOUTH ON MARKETING COMMUNICATIONS**

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Abstract**EXPLORING THE IMPACT OF NEGATIVE COMPARATIVE WORD-OF-MOUTH ON MARKETING COMMUNICATIONS**

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Along with advances in network and communication technologies, consumers actively post their opinions about products and increasingly rely on other consumers' product reviews on social networking sites. Their product reviews should contain different types of information content and information format since they often evaluate products based on different types of product benefits and compare different brands within the same product class to get the best value for their money. However, previous studies only examined negative WOM communications by using a general product statement.

This dissertation study argued that WOM communications should encompass cognitive and affective information content, and comparative and noncomparative information format. Through integrated analysis of information content and information format, this dissertation attempts to reveal the impact of different types of negative WOM communications on consumer attitudes, and the moderating effect of advertising communications on the relationship between negative WOM communication and consumer attitude.

Two experiments were conducted to test the proposed research models empirically. The study found that cognitive advertising communication moderates the relationship between negative cognitive WOM communication and consumer attitude; affective

advertising communication moderates the relationship between negative affective WOM communication and consumer attitude.

CHAPTER 1: INTRODUCTION

Background of Present Research

Along with the rapid advances of Internet technologies in today's marketing world, WOM communications have become more powerful in influencing consumer attitudes. Negative consumer reviews about a product or seller have been more often posted on social networking sites, far beyond the control of marketers. Especially dissatisfied consumers more actively engage in negative WOM communications online (Richins 1983), which may greatly increase the spread of negative WOM communications. When consumers need to evaluate the unfamiliar products or sellers, they are most likely to rely on WOM communications to make a decision (Herr, Kardes, and Kim 1991). Negative WOM communications may have a dramatic impact on consumer attitudes since consumers tend to actively access to other consumers' reviews online. For this reason, negative WOM communication has become a big challenge for marketers to develop positive consumer attitudes.

Marketers have long sought to reduce the detrimental effects of negative WOM communications using various marketing activities in response to a product or service failure. Although the effects of negative WOM communications have not been clearly identified, much research has discussed the role of negative WOM as the opposite of positive WOM communications. Substantial empirical studies have addressed that a favorable recovery reduces the damaging effects of negative WOM communications on consumer attitudes or even create positive WOM communications. Current research emphasized the role of excellent marketing activities in reducing the damage of negative WOM communications. The recovery activities might have effectively

reduced the damaging effects of negative WOM communications in the pre-stage of Internet social networking. However, in the digital communication environment, the damages of negative WOM communications may dilute the persuasive effectiveness of marketing activities that are meaningful to individual customers.

Over the past a few of decades, a considerable amount of research has examined the antecedents and consequences of positive WOM (de Matos and Rossi 2008).

Emerging research has extended the studies of WOM communications to the social networking sites (Chen, Fay, and Wang 2003; Libai et al. 2010). Several studies have explored the effects of different types of information in WOM communications on consumer attitudes. For example, Delgadillo and Escalas (2004) argued that narrative information in WOM communications has a stronger persuasive effect and leads to positive consumer attitudes.

Notwithstanding WOM communication should include different types of information in the real marketplace, research in this field is still very insufficient (Delgadillo and Escalas 2004; Schellekens, Verlegh, and Smidts 2010). Substantial prior research has addressed that consumers evaluate products based on instrumental or affective benefits (Laczniak, DeCarlo, and Ramaswami 2001). Previous research proposed that consumer would also express their affective responses to the product consumption experiences in WOM communications (Kalamas, Laroche, Makdessian 2008; Westbrook 1987). Kalamas, Laroche, Makdessian (2008) pointed out that negative product experience is more likely to generate negative affective responses and negative WOM communications. As a result, affective information may be popularly

presented in WOM communications to evaluate consumers' product experiences, as cognitive information.

In the meanwhile, as multiple brands in the same product class compete in a crowded market today, consumers are inclined to compare different brands for the best values. Delgadillo and Escalas (2004) suggest that consumers often express product attributes in a logical manner to influence others' opinions about a product when they engage in delivering WOM communications. Consumers attempt to compare different brands in WOM communications in order to make their product reviews more persuasive.

Notwithstanding the abundance of comparative information in WOM communications in the real marketplace, previous research examined WOM communications that are concerned about only one brand. In addition, the current research centered on WOM communications that contain cognitively based information about product attributes. This dissertation research argued that WOM communications should contain cognitive or affective information content and be constructed in a comparative or noncomparative information format.

Previous studies showed that comparative advertising had more persuasive effects than noncomparative advertising. However, a few studies reported that the difference between the effects of comparative versus noncomparative advertising on consumer attitudes is inconsistent across studies (e.g., Puto and Wells 1984; Ratchford 1987; Vaughn 1980). Yagci, Biswas and Dutta (2009) suggest that types of advertising claims are considered as a major explanation for the inconsistent results produced in previous studies on comparative advertising. Their study provided evidence that comparative information format enhanced the effects of advertising on consumer

attitudes when advertising claims are based on product performance related to product attributes.

Research in marketing communications has demonstrated that comparative information format may enhance the effects of cognitively based information about product attributes on consumer attitudes, while may not impact the effects of affectively based information not related to product attributes. The current research indicated that the effects of comparative versus noncomparative information format on consumer attitudes should be investigated with cognitive versus affective information content in one study. An insufficient focus on the impact of different types of information content and information format has hindered our ability to understand and effectively reduce the detrimental effects of negative WOM communications on consumer attitudes. The growing evidence that WOM communications contain cognitive or affective information content and comparative versus noncomparative information format emphasized the importance for marketers to examine the impact of negative WOM communications.

The integration of WOM and advertising communications is another huge challenge facing marketers. Marketers have usually applied various marketing activities to create positive WOM communications as well as prevent negative WOM communications. Negative WOM communications have nevertheless not been entirely avoided or prevented by performing various marketing activities. When negative WOM events occur, consumers are more likely to post negative WOM communications on social networking sites. Thus, They often receive both of advertising and negative WOM communications about a product through multiple

sources and media today. Little research has attempted to investigate the effects of WOM and advertising communications (Smith 1993). The interaction effects between negative WOM and advertising communications are especially important since negative WOM communications are paid more attention to, especially at the point of decision.

Prior research mostly examined the effects of negative WOM communications in an isolated context although consumers often receive both of negative WOM and advertising communications in the real marketplace. Smith and Vogt (1995) proposed an interaction effect between negative WOM communications and Advertising communications. Their study found that negative WOM communications significantly reduced the perceived credibility of advertising communications, and thus the advertisement didn't have a significant effect on attitude toward the brand. Specifically, their study examined negative cognitive WOM and cognitive advertising communications that only encompassed product attribute information. Some important questions concerning negative WOM are still not answered in the digital communication environment. To achieve a deep understanding of negative WOM communications, more examinations of different types of information in negative WOM communications are needed.

Role of the Current Study

Because of the important role of negative WOM communications in influencing consumer attitudes, understanding the effects of negative WOM and the interaction effects between negative WOM and advertising communications will be beneficial to both academics and marketers. The purpose of this dissertation is to examine the

effects of negative comparative WOM communications and the interaction effects of negative comparative WOM and marketing communications on consumer attitudes by identifying specific information types.

Although much research has examined different types of information content and information format in advertising separately, the two information types haven't been integrated to examine the impact of advertising claims in one study. Likewise, information content and information format haven't been used together to examine the effects of negative WOM communications and the interaction effects between negative WOM and advertising communications.

The integration of information content and information format is helpful to identify the effects of negative WOM communications, varying in the information types, on consumer attitudes. As consumers increasingly seek negative WOM and advertising communications, the effectiveness of negative WOM communications and the interaction of WOM and advertising communications are becoming essential concerns in the selection of advertising tactics.

Previous research suggests that the communication effectiveness of cognitive and affective advertising appeals relies on the type of product benefits that consumers pursue (e.g., Puto and Wells 1984; Ratchford 1987; Roselli, Skelly and Mackie 1995). Moreover, current research proposed that the comparative versus noncomparative information format in advertising has different effects on consumer attitudes, and the information format was only examined in the context of cognitive advertising appeals (e.g., Grewal et al. 1997; Donthu 1998). This makes a big gap between academic

research and the reality of negative WOM communication in the marketplace. In order to bridge the gap, more attention should be given to the varying information types in negative WOM communications and advertising communications.

The integration of information content and information format into this study contributes to knowledge in the effectiveness of negative WOM communications and the selection of advertising communications in response to negative WOM communications. There exists a long debate about the persuasion differences between comparative and noncomparative advertising. Much of research has addressed that comparative advertising is more persuasive than noncomparative advertising (e.g., Dröge and Darmon 1987; Earl and Pride 1980; Grewal et al. 1997). But in these studies, only cognitive advertising claims were given to the subjects.

According to the Elaboration Likelihood Model (Petty and Cacioppo 1986), cognitive information is processed centrally and affective information is processed peripherally. Therefore, the cognitive information content in negative WOM communications will be processed centrally to form consumer attitudes and the affective information content in negative WOM communications will be processed peripherally to form consumer attitudes. Furthermore, prior research has shown that comparative information format in cognitive advertising generated greater persuasion effects than noncomparative information format. Likewise, negative cognitive WOM communications in a comparative information format may have a greater effect on consumer attitudes than in a noncomparative information format. Contrary to cognitive information, affective information is processed peripherally to generate feeling responses. Affective information content in a comparative information format

may not have superior effects on consumer attitudes than in a noncomparative information format.

A substantial body of research has addressed the damaging effects of negative WOM communications. A couple of studies argued that negative WOM communications may lead to positive results, instead of negative results. For example, Liu (2006) found that negative WOM communications increased movie ticket sales. Additionally, Romaniuk (2012) proposed that negative WOM communications shouldn't only have negative effects on consumer attitudes, and certain negative WOM communications may cause positive effects on consumer attitudes.

Nearly all of the previous work has investigated the impact of negative WOM communications in an isolated context. Little is known about how variables under marketer's control, such as the format of advertising, might be the moderator by which negative WOM communication forms consumer attitudes. This present study investigated the effects of the different information types in negative WOM communications on consumer attitudes and uncovers which advertising tactics should be utilized to diminish the harmful effects of certain types of negative WOM communications or even to develop the positive effects of certain types of negative WOM communications more effectively.

Research Objectives

This dissertation examined the effects of negative WOM communication and the interaction effects between negative WOM and advertising communication by integrating the information content and the information format in WOM as well as

advertising communications. Given the abundance of comparison among different brands and product evaluations built upon two types of product benefits, this integration offered significant advantages over the simplified conceptualization of WOM communications manipulated by cognitively based product statement in previous research. This study explored whether different types of information in negative WOM communications have different effects on consumer attitudes, and whether certain types of advertising can be applied to reduce the harmful effects of negative WOM communications.

CHAPTER 2: LITERATURE REVIEW

The aim of this dissertation is to go beyond the examinations of general negative WOM communications in previous research and to explore the persuasion effects of different information types of negative WOM communications in the context of marketing communications. Thus, in this chapter existing research about WOM communications and the contemporary theories upon which this study develop will be reviewed. The integration of the information content and the information format in WOM communications was developed and applied to examine the effects of different information types of WOM communication on consumer attitudes and the moderating effects of advertising communication on the relationship between the factors.

Word-of-Mouth (WOM)

Researchers and marketers have long embraced the effectiveness of WOM communications on consumer attitudes (e.g., Brown and Reingen 1987; Brown and et al. 2005; Delgadillo and Escalas 2004). The most common conceptualization of WOM communication used in previous research is “all informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers” (Westbrook 1987, p. 261). WOM communication is also defined as a process of spreading information about a product or its seller between consumers (e.g., File, Judd, and Prince 1992; Harrison-Walker 2001).

These definitions of WOM communication commonly used in prior research have demonstrated the three characteristics of WOM communication: 1) information in WOM communication is informal (Buttle 1998), and may be accessed by numerous consumers with the advancement of Internet technology; 2) consumers rely on WOM communications as an important information source about products, or companies (Cohen and Golden 1972); 3) WOM is believed to be out of direct control of companies since it is generated by consumers (Bone 1992).

According the definitions of WOM communication, a large body of marketing research concerning WOM communication is actually centered at WOM activities (e.g., de Matos and Rossi 2008). Katz and Lazarsfeld (1955) conducted the first study, which examined the effects of WOM communications. Following their research, substantial research has demonstrated that WOM communication has great influence in forming consumer attitudes (e.g., Arndtz 1967; Bone, 1992; Laczniak, DeCarlo, and Ramaswami 2001; Richins 1983, 1984). For example, in Schumann and his colleagues' cross culture study (2010), WOM communication was found to positively influence consumer's perceptions of service quality.

Prior to the prevalence of Internet usage, WOM messages are sent, transmitted in consumers' local group of friends and family (Chen, Fay and Wang 2003).

Consumers are connected at various touch points through social networking sites in today's marketplace (Libai et al. 2010). WOM communications have substantial longer effects than face-to-face interpersonal communications since WOM messages are sent, received, and transmitted through numerous social networking sites (Trusov, Bucklin and Pauwels 2009). WOM communication plays an important role in shaping

and changing consumer attitudes toward a product because WOM communication has become an important resource of product information for consumers.

In addition, researchers generally agreed that negative WOM communications have greater effects on consumer attitudes and behaviors than positive WOM communications (e.g., Wetzer, Zeelenberg, and Pieters 2007). For instance, negative WOM communications may jeopardize the reputation of a company when consumers indulge in revenge against its brand. Importantly, the transmission of negative WOM messages through social networking sites may elicit extensive and long-term damages. Considering the great detrimental effects of negative WOM communications, more research is needed to comprehend the mechanism by which negative WOM communications impact consumer attitudes.

Although there has been increasing research on WOM communications, the majority of previous research focused on the activities of WOM communications, such as positive WOM intention (e.g., Westbrook 1987; Orsingher, Valentini and de Angelis 2010). As such, in prior research, WOM communication is generally measured by recommendation behavior or its intention. For example, File, Cermak, and Prince (1994) measured WOM communication as the probability of “telling other business associates what you thought of the service provider”. Similarly, in Danaher and Rust’s (1996) study, WOM communication is measured as “likeliness to recommend” (p. 68). Currently, research on WOM communications has been extended to social networking sites (e.g., online forums and virtual communities).

Much attention has been paid to the antecedents and consequences of WOM communications, especially positive WOM communications, through face-to-face conversations or digital communications (e.g., Duan, Gu, and Whinston 2008, de Matos and Rossi 2008; Jayawardhena and Wright 2009; Trusov, Bucklin, and Pauwels 2009). The determinants of positive WOM communications are generally acknowledged to be successful marketing activities (e.g., Brown et al. 2005, Orsingher, Valentini and de Angelis 2010). Meanwhile, negative WOM communications can be turned into positive WOM communications through successful recovery activities (e.g., Maxham 2001; Orsingher, Valentini and de Angelis 2010). Specifically, Maxham (2001) proposed that negative product experiences can create positive WOM communications through successful service recovery. Similarly, Orsingher, Valentini and de Angelis (2010) suggest that effective complaint handling may generate positive WOM communications.

Negative WOM communication has been neglected in marketing literature even though it has more power in shaping consumer attitudes than positive WOM communication (e.g., Arndt 1967; Mizerski 1982). Past research concerning negative WOM communication generally suggests that recovery activities should be used to avoid or prevent negative WOM communications, which may have been sufficient in the pre-Internet age. Today, the detrimental effects of negative WOM communications may not simply be diminished by delivering successful recovery activities to customers or developing effective relationship with customers since negative WOM messages may be sent to numerous consumers through Internet-based social networking sites.

The research models of negative WOM communications have been primarily examined by general negative statement without much consideration of different information types of negative WOM communications. In Singh's (1990) study, a single item was utilized to measure negative WOM communication: "told my friends and relatives about my bad experience". Likewise, with the emphasis of WOM communications triggered by dissatisfaction, Richins (1983) measured negative WOM communication as "the act of telling at least one friend or acquaintance about the dissatisfaction." Researchers generally believe that negative WOM communications should encompass a general negative information regardless product or company (Wetzer, Zeelenberg, and Pieters 2007). Consequently, negative WOM messages were simply manipulated by general product statements in passed studies. As described before, in previous research, WOM communication is generally defined as interpersonal conversations between consumers about products or companies. According to these definitions, WOM messages should contain different types of information since consumers tend to seek different types of benefits of their consumptions and describe those benefits using different types of information correspondingly. The overall lack of attention to different types of information in WOM communications, especially negative WOM communications, is a research gap in the field of WOM marketing.

Recently, research regarding the information type in WOM communications is receiving increasing attention in marketing disciplines (Sweeney, Soutar, and Mazzarol 2012). Existing research primarily examined cognitive information content of WOM communications. There is insufficient research on different types of information content in WOM communications and the effects of the information type

on the WOM receivers (Sweeney, Soutar, and Mazzarol 2008). Recently, some research has provided evidence that WOM communications may encompass different types of information content (Libai and et al. 2010; Mazzarol, Sweeney, and Soutar 2007; Sweeney, Soutar, and Mazzarol 2008).

Delgadillo and Escalas (2004) found that WOM communications are often described in the form of a story about a product or company. However, the study regarding narrative WOM communications actually reflected one characteristic of WOM communications, which are informal conversations between consumers about products or companies. Lee, Rodgers, and Kim (2009) examined the direction and extremity of information in WOM communications and its effects on attitude toward the brand. Their study found that extremely negative information in WOM communication had a more significant effect on consumer attitudes. This finding is consistent with previous research regarding a comparison between negative WOM and positive WOM communications on consumer attitudes (e.g., Chevalier and Mayzlin 2006).

Lately, Schellekens, Verlegh, and Smidts (2010) identified abstract versus nonabstract language in WOM communication. Their study showed that the choice of abstract and nonabstract language in WOM communication depends on consumer's priori attitude to a product. Specifically, consumers are more likely to use abstract language to describe their negative product experience when their priori attitude to the product is negative. This study examined WOM communication in certain circumstance where WOM senders and receivers are both familiar with the product and know each other well. After all, people inside the group don't need more concrete information in their

conversation since they are aware of the object or subject. Spreading and receiving WOM messages inside a group may be one reason for using abstract language.

To date, however, with the pervasive use of Internet technology, abstract and nonabstract language may not be sufficient to understand the effects of WOM communications on consumer attitudes in the digital world, which consumers increasingly rely on WOM communications from unknown customers outside the group. Furthermore, too many products available in the same product class make it impractical for consumers to evaluate competing products or services based on their prior attitude toward a product or brand. Therefore, although passed studies explored to certain information types in WOM communications, those research models were tested in a constrained scenario.

Negative WOM

Richins (1984) has pointed out that previous research concerning positive WOM communications has long been applied to understand negative WOM communications, while there is so little in depth, comprehensive research done on negative WOM communications. Based on the definition of WOM communication (Arndt 1967) and of negative information (Weinberger, Allen, and Dillon 1981), negative WOM communication was defined as “interpersonal communication among consumers concerning a marketing organization or product which denigrates the object of the communication” (Richins 1984, p.697). Prior research generally suggests that negative WOM communications have detrimental effects on consumer attitudes and behaviors: negative WOM communications create negative attitude toward a product

and discourage purchase intention (e.g., Arndtz 1967; Herr, Kardes, and Kim 1991; Laczniak, DeCarlo, and Ramaswami 2001; Richins 1983).

With respect to the potency of negative WOM communications, researchers have compared the effects of negative WOM communications with the effects of positive WOM communications on consumer attitudes. Research has demonstrated that negative WOM communications have more power in influencing consumer attitudes than positive WOM communications (e.g., Chevalier and Mayzlin 2006; East, Hammond, and Lomax 2008; Skowronski and Carlston 1989). In addition, negative WOM communications are more likely to be transmitted than positive WOM communications (Donovan, Mowen, and Chakraborty 1999). Furthermore, researchers suggest that the comprehension of negative WOM communications involves cognitive processing (Laczniak, DeCarlo, and Ramaswami 2001). Negative WOM messages are observable and searchable in the digital world (Newman 2003). With the pervasive use of social networking sites, people at distances from each other are able to spread opinions extensively and vent their feelings against a product or company. Given that the impact of negative WOM communications on consumer attitudes may be greater than positive WOM communication, this dissertation focuses on the former.

Academicians and practitioners have long believed that negative WOM communications have negative effects on consumer attitudes. However, the findings regarding the consequences of negative WOM communications are inconsistent across studies (Chevalier and Mayzlin 2006). For example, Laczniak, DeCarlo, and Ramaswami (2001) showed that negative WOM communications generated negative

brand attitudes when product or service failures were attributed to the brand, whereas it didn't generate negative brand attitudes when the product failures were attributed to the users. Likewise, using the real WOM messages in an online newsgroup, Newman (2003) reported that not all negative WOM communications created negative consumer responses. In addition, Newman (2003) proposed that consumers make cognitive efforts to interpret negative WOM messages to attribute negativity toward a brand or WOM communicator. He suggests that negative WOM communications won't create negative consumer responses when consumers attribute the negative WOM messages to situational causes, such as uncontrollable forces in business and consumer-related reasons.

Recently, Liu (2006) found that negative WOM communications didn't always have negative effects on movie ticket sales. This result may be caused by the difficulty of evaluating movie quality having the subjective nature of movie consumption. In fact, this study showed that negative WOM communications depict the affective feelings experienced during product consumption. The passed studies demonstrated that different types of information content in WOM communication should have different persuasive effects.

Laczniak, DeCarlo, and Ramaswami (2001) proposed that negative WOM communications should be more complicated than a general product statement tested in prior research. A study conducted by Sen and Lerman (2007) suggest that WOM communications regarding functional experiences tend to be attributed to product-related features, while WOM communications for affective experiences are more likely to be attributed to non-product related features. They suggest that negative

WOM communications related to non-product related reasons are perceived less useful by consumers than those related to product-related reasons because consumer reviews regarding affective feelings are relatively subjective. Existing research provided strong evidence which negative WOM communications not only contain cognitive information regarding product-related features, but also affective information regarding non-product related features (e.g., Sen and Lerman 2007; Wetzer, Zeelenberg, and Pieters 2007).

To summarize, while the above studies provided evidence that WOM communications may contain either cognitive or affective information content, little research has examined affective information content in WOM communications. It seems natural to expect that WOM communications encompass cognitive or affective information content since consumers access utilitarian or affective benefits of a product, and thus communicate the consumption experience accordingly. Although a substantial body of research has been conducted on the affective and cognitive information in advertising, few researchers inspected the affective information content in WOM communications.

Generally, the information contents in advertising are dichotomized as cognitive (informational) and affective (transformational). Vaughn (1980; 1986) and Ratchford (1987) suggest that advertising appeals can be divided into “thinking” and “feeling” categories. Likewise, Aaker and Norris (1982) classified the two basic types of advertising appeals, “informational/rational/cognitive” and “image/emotional/feeling.” In the same vein, Puto and Wells (1984) developed informational and transformational advertising scale. In accordance with this conceptualization,

informational advertising appeals refer to cognitive appeals, while transformational advertising appeals refer to affective appeals.

Informational advertising appeals present important and relevant product information and facts; and transformational advertising appeals depict affective benefits, which are closely and exclusively associated with the consumption experience of the advertised brand. Puto and Wells (1984) contended that informational advertising appeals should have the following characteristics: “present factual, relevant information about the brand; present information which is immediately and obviously important to the potential consumer; present data which the consumer accepts as being verifiable” (Puto and Wells 1984, p. 638).

Transformational advertising appeals should involve these characteristics: “must make the experience of using the product richer, warmer, more exciting, and/or more enjoyable, than that obtained solely from an objective description of the advertised brand; must connect the experience of the advertisement so tightly with the experience of using the brand that consumers cannot remember the brand without recalling the experience generated by the advertisement” (Puto and Wells 1984, p. 638).

The information content type in WOM communication may be contingent on the functional or psychological side of product consumption experiences, and meanwhile WOM communication may involve a comparison of a challenging brand with a leading brand in the same product class. Prior research has demonstrated that consumers may compare the benefits of different brands in WOM communications

(Laczniak, DeCarlo, and Ramaswami 2001). Researchers have examined WOM communications with reference to only one brand. The comparative information format in negative WOM communication should be examined since the comparative versus no comparative information format may create different effects on consumer attitudes. The present studies concentrated on the comparative versus noncomparative information format in advertising communications (e.g., Grewal et al. 1997). The literature, however, ignored the role of the comparative versus noncomparative information format in WOM communications.

By definition, the comparative information format represents “explicitly naming or identifying one or more competitors of the advertised brand for the purpose of claiming superiority over them either on an overall basis or in selected product attributes” (Prasad 1976, p. 128). The characteristics of the comparative information format follow the below: 1) the contrast between two or more brands in the same product class; 2) the differences based on one or more product attributes (Wilkie and Farris 1975). According to the general definition and measurement of comparative and noncomparative information format in advertising, comparative information format is examined in the context of cognitive information. Though earlier studies greatly contributed to the knowledge of the impact of comparative information format on consumer product perceptions, comparisons between a challenging brand and a leading brand in advertising are still constrained to cognitively based information attributes (Dröge and Darmon 1987; Grewal et al. 1997; Wilkie and Farris 1975).

Furthermore, there is a large body of research that examined the relative effectiveness of the comparative versus noncomparative information format on consumer responses. However, prior research didn't indicate that there were consistent differences in relative effectiveness of the comparative versus noncomparative information format in advertising on consumer responses (e.g., Belch 1981; Goodwin and Etgar 1980; Gorn and Weinberg 1984; Jeon and Beatty 2002; Putrevu and Lord 1994). Some researchers postulated that the mixed results shown in the previous studies should be caused by the different types of products tested cross studies (Gorn and Weinberg 1984). The nature of information contents should be considered for examining the relative effectiveness of comparative versus noncomparative information format because consumer's product reviews depict different types of product benefits.

Negative WOM and Advertising Communications

Increasingly, consumers often access to, send and/or transmit product reviews on the social networking sites. Meanwhile, companies appear more devoted to using the social networking sites to ensure that their advertising claims about their brand are extensively noticed. Therefore, consumers are more likely to access to WOM communications about a product directly through the social networking sites, and also to be exposed to advertisements for the product. Exponential growth of access to WOM communications poses new and difficult challenges for marketers to manage and promote brands through marketing communications.

Researchers have extensively documented that WOM communications have an important effect on consumer attitudes, and some researchers even suggest that WOM communications have a more powerful effect on consumer attitudes than marketing

communications (e.g. Engel, Blackwell, and Kegerreis 1969; Katz and Lazarsfeld 1955), and are more persuasive than marketing communications (Bickart and Schindler 2001; Brooks 1957). Previous research has examined the impact of WOM communications on consumer attitudes in an isolated communication environment. Despite the recognition of the influence of marketing communications, very little research has examined the advertising communications in response to specific negative WOM communications (Graham and Havlena 2007), although the impact of WOM for advertising communications has been raised in recent research. A big gap in marketing research on WOM communications sharply contrasts the reality, which WOM communications may intervene the effects of marketing communications on the consumer attitudes toward products when consumers are exposed to both of them.

Katz and Lazarsfeld (1955) examined the effects of advertising on WOM communications. They stressed the role of advertising communications, and proposed that advertising can stimulate WOM communications and impact the contents of WOM communications. Additionally, they suggest an interaction process model, by which the influence of advertising on WOM communications may be explained: opinion leaders are actively engaged in receiving product information from mass media than the general public, and in turn passed on their opinions to others in addition to the original media content. The results of their study have showed that people received ideas from opinion leaders much more frequently than from the mass media. Hence, the persuasive effects of advertising communications may be strengthened by opinion leaders' dissemination of "advertising influenced" ideas to the general public.

Keller and Fay (2009) investigated the relationship between WOM and advertising communications. In line with Katz and Lazarsfeld's (1955) study, their study illustrates the interaction effects between WOM and advertising communications. Their study has showed that around twenty percent of WOM communications concerning brands contain some information seen or heard from advertising, and about thirty percent online WOM communications involve some information seen or heard from advertising. They argued that online WOM communications didn't reduce the effects of advertising communications. On the contrary, online WOM communications are more likely to involve a reference to advertisements about that brand than traditional face-to-face WOM communications because there are numerous tools to drive consumers to online advertising.

In the meanwhile, previous studies pointed out that advertising is losing the greatest influence on consumer attitudes because diminishing trust in advertising, the abundance of media options, increasing Internet usage, and declining importance of advertising for consumers (Godin 2005; Jaffe 2005; Sernovitz 2006; Trusov, Bucklin, and Pauwels 2009). Keller and Fay (2009) believe that advertising still plays an important role in impacting consumer attitudes, although consumers are reluctant to admit that they are influenced by an ad to make a purchase. They suggest that WOM communication doesn't replace the function of advertising communication; and advertising communication affects the content of WOM communication and its effect on attitudes in the age of web-fortified consumers. Following their study, Graham and Havlena's (2007) study indicated that advertising communications can be used to generate positive WOM communications. The current studies simplified the relationship between advertising and WOM communications.

Attitudes

Attitude is an important construct to measure consumer response to messages and stimuli materials in behavioral research because it is believed to explain a wide range of human behavior (Peter and Olson, 1990). In order to comprehensively understand consumer response and behavior, social psychologists have utilized different approaches to define attitudes. Hence, there are so many different definitions of the concept. Although researchers don't agree on any precise definition of an attitude, most of the definitions are based on a reference to an individual's feeling or overall evaluation to an object (Fishbein and Ajzen 1975).

Most researchers (Lutz 1985; Petty, Wegener, and Fabrigar 1997) accept Fishbein's (1967, p. 257) definition of attitude as "learned predispositions to respond to an object or class of objects in a favorable or unfavorable way". This definition assumes that a receiver develops attitudes toward object through actively receiving information (Bright, Fishbein, and Bath 1993). Hence, attitude is learned, rather than instinctive. In addition, this definition suggests that attitudes can be influenced by marketing messages and directed toward an object. WOM or advertising communications regarding a product may impact consumer attitudes toward the product.

WOM communication is likely to have a stronger influence on consumer attitudes toward the product as the digital revolution has enlarged and speeded its reach to consumers. Consumers tend to actively access to and process WOM communications for product evaluations, especially when consumers are buying a product for the first time. Attitude toward the product is a widely used dependent variable in consumer

behavior research, which refers to consumer's particular attitude toward a product.

Attitude toward the product measures the general evaluations or feelings of favorableness or unfavorableness toward a product when the WOM and advertising communications are reviewed.

In studies concerning WOM communications, the effects of the cognitive information content in WOM communications on consumer attitudes are often discussed in the literature review (e.g., East, Hammond, and Lomax 2008; Skowronski and Carlston 1989; Laczniak, DeCarlo, and Ramaswami 2001). The impact of the cognitive information content in WOM communications on consumer attitudes has received the most research attention, so currently less is known about the impact of the affective information content in WOM communications on attitudes, although a couple of research has identified that WOM communications may contain either the affective information content or the cognitive information content.

Several researchers pointed out the inconsistent effects of comparative versus noncomparative advertising on consumer attitudes across studies (Chevalier and Mayzlin 2006; Laczniak, DeCarlo, and Ramaswami 2001) because all the pretested ads contained only cognitive advertising appeals. However, prior research has shown that cognitive versus affective advertising appeals have effects on consumer's attitudes in different mechanisms. Attitude toward the product measured here was to examine whether cognitive versus affective information in WOM messages generates different persuasive effects.

Research in consumer behavior has traditionally assumed that attitude toward a product is based on two models of attitude-change processes, the heuristic and the peripheral processing route (Chaiken 1980; Petty and Cacioppo 1979). These research models indicated that the peripheral processing route usually involves a limited elaboration of message arguments. The persuasion of peripheral route is based on execution cues and source likability (Batra and Ray 1986). Researchers have sought to reveal the effects of the cognitive versus affective advertising appeals on consumer attitudes through heuristic and/or peripheral processing.

Lutz (1985) proposed that the determinants of attitude toward the ad include not only cognitive reactions but also affective reactions to the advertising stimuli. Yoo and MacInnis (2005) proposed and examined the different processes by which affective and cognitive appeals affect consumer attitude toward the ad and attitude toward the brand. They suggest that positive feelings induced by the affective advertising appeals make the ad more meaningful, and subsequently the meaningfulness has positive effects on consumer attitudes; the meaningfulness generated by cognitive advertising appeals creates positive feeling responses, and subsequently the positive feelings affect consumer attitudes. Expanding beyond the role of cognitive reactions to the advertising stimuli, Batra and Ray (1986) investigated consumer's moods and feelings evoked by affective advertising appeals on attitudes. The findings of Batra and Ray (1986) suggest that consumer's affective responses determine attitude toward the ad, while attitude toward the ad has a weak but significant effect on attitude toward the brand.

Since consumers always attempt to pursue the best value for their money, they are most likely to compare different brands in WOM communications. Research on the format of advertising has investigated the different effects of comparative versus noncomparative information format on consumer attitudes. For example, Wilkie and Farris (1975) proposed that advertising in a comparative format should generate more attention, recall and comprehension of claims than advertising in a noncomparative format. Prior research had demonstrated that different types of information content may influence the process by which attitude toward the product is formed and different types of information format may have different effects on attitudes. Therefore, the information content and the information format in WOM communications should have different effects on attitude toward the product and the information content and the information format of ad will moderate the relationship between WOM communications and attitude toward the product. To develop our hypotheses, we integrated the information content and the information format in WOM and advertising communications. With this integration, we attempt to provide insights into marketing communication strategy to manage negative WOM communications.

Theoretical Framework

A review about the information content and the information format in negative WOM communications has been conducted. The cognitive information and the noncomparative information format in WOM communications have been extensively examined in WOM research. The information types in WOM communications should be more complex in nature than previous research assumed. In order to provide a thorough understanding of the effects of negative WOM communications on

consumer attitudes, an overview of the models concerning persuasion is also needed.

In the following section, a couple of models are used to predict the effects of the different information types of negative WOM communications and the interaction effects of WOM and advertising communications will be covered.

Elaboration Likelihood Model of Persuasion (ELM)

Historically, the Elaboration Likelihood Model of Persuasion (ELM) has been applied to understand the process responsible for attitude change. The ELM holds that attitudes can be changed via the central versus peripheral routes (Petty and Cacioppo 1981, 1986). The application of two different routes is contingent on the motivation and ability of an individual to process the message (Petty and Cacioppo 1986). The central route involves cognitive efforts, in which the individual analyzes and assesses the issue-relevant information presented in the communication environment. The central route occurs if the individual focuses on analysis of product-relevant information such as product attributes.

Contrary to the central route, the peripheral route requires minimal cognitive efforts to assess information presented in the communication environment such as peripheral cues. For the peripheral route to occur, some simple cues in the context of persuasive communication impact attitudes. The cues may elicit an emotional response (e.g., happiness) that a person processes without diligent efforts (Staats and Staats 1958), or elicit a fairly simple inference of a persuasive communication (e.g., “I bought it, I must like it, Bern 1972), or use heuristics to judge a message (e.g., “if any expert says it, it must be true”, Chaiken 1987). The favorable cognitive or affective responses

elicited by communications lead to positive attitudes, and the negative cognitive or affective responses elicited by communications lead to negative attitudes (Greenwald 1968, Petty, Ostrom and Brock 1981).

According to the ELM, the central route is most likely to be applied when consumers fully process the WOM communications. The ELM has been used to explain the process by which attitudes are formed by cognitive versus affective advertising. Many researchers have paid great attention on how the cognitive versus affective advertising appeals have an effect on consumer attitudes. They suggest that the cognitive advertising appeals are processed in the central route, while the affective advertising appeals are processed in the peripheral route. However, little attention has been paid to the role of the affective information content in WOM communications.

Consumers are highly motivated and able to process WOM communications since they actively seek and access to information related to a product, which contains familiar topics to them. Past research has shown that consumers paid more attention to negative WOM communications than positive WOM communications. Negative WOM communication should be processed more carefully than positive advertising appeals.

Consumers evaluate products by different types of consumption benefits, such as functional or psychological benefits (Sen and Lerman 2007). Cognitively based information regarding product attribute is more likely to be used for the persuasive communication, and affectively based information regarding product psychological benefits is more likely to be used for persuasive communication. Consumers may

make more cognitive efforts to process product attribute information than subjective feeling responses to product consumption experiences because the former is attributed the product failure to product related reasons. As a result, the cognitive information content in WOM communications may be processed more carefully than the affective information content in WOM communications.

Previous research has suggested that advertising in a comparative format is more stimulating and personal relevant because it comes about more information than in a noncomparative format (Hsieh et al. 2011). A number of studies (Droge 1989; Grewal et al. 1997; Muehling, Stoltman, and Grossbart 1990; Pechmann and Stewart 1990) demonstrated that advertising in a comparative format attracts more attention and elicits more elaboration. Specifically, Droge (1989) suggest that advertising in a comparative format may be processed more centrally than it in a noncomparative format, and the difference in information processing was attributed to the differential effects of comparative versus noncomparative information format on generating attention and elaboration. Previous studies indicated that the cognitive information content in a comparative information format is likely to be processed more centrally than it in a noncompetitive information format since the comparative format may produce extensive issue-relevant considerations. Hence, the cognitive information content in a comparative information format may have a greater effect on consumer attitudes than in a noncomparative information format.

Different with the cognitive information content, the affective information content is processed in the peripheral route whereby persuasion is achieved through eliciting affective state, or triggering simple inference or cues, instead of inducing extensive

issue-relevant considerations. Previous research regarding the comparative versus noncomparative information format in advertising has only examined the effects in the context of the cognitive advertising appeals. The difference in the effects of the comparative versus noncomparative information format in advertising on attitudes hasn't been examined yet in the context of the affective advertising appeals.

A key prediction of the ELM is that persuasion is achieved through heuristic cues in the context of affective information. On the heuristic route situation, the actual differences between two brands and logic of opposing arguments are likely to have less effect on consumer attitudes, while the heuristic cues are likely to have stronger effect on consumer attitudes. According to the ELM, we expect that although the affective ad appeals in a comparative information format may have different effects on receiver's attitudes than in a noncomparative information format, these effects on attitudes may not be significantly different between a comparative and a noncomparative format.

Accessibility and Diagnosticity

The accessibility-diagnostics model has long been used to assess the impact of information on attitudes. Lynch, Marmorstein, and Weigold (1988, p. 171) addressed that "An input is diagnostic for a judgment or decision to the degree that consumers believe that the decision implied by that input alone would accomplish their decision goals (e.g., maximize utility, choose a justifiable alternative, and so on)." The accessibility-diagnostics model proposed that an input will be used in determining a related judgment if the former is accessible and sufficiently diagnostic (Feldman and Lynch 1988). According to the accessibility-diagnostics model, any cue increases

the accessibility and diagnosticity of an input is expected to increase the likelihood with which that input will be used for the related judgment.

The likelihood that information about a brand will influence consumer's judgment is contingent on its accessibility and diagnosticity relative to competing inputs (Feldman and Lynch 1988; Lynch, Marmorstein, and Weigold 1988). A message is likely to be more accessible when a consumer engages in elaboration of the message through comprehensive cognitive processing (Petty and Cacioppo 1986). Consumers may be concerned more about the cognitive information content in WOM communication because it encompasses the objective product attributes. On the contrary, consumers may give less weight to the affective information content in WOM communication because it contains the subjective product experiences. As such, the cognitive information content may make WOM communication more accessible, while the affective information than the affective information content may make WOM communication less accessible.

If all the information is accessible, the most diagnostic information is the most effective in influencing consumer's judgment (Feldman and Lynch 1988). Negative WOM communications should be more accessible and diagnostic than advertising communications because WOM communications are seen as more credible and influential than advertising communications, especially negative WOM communications. Information about a challenging brand's superiority over a leading brand is more diagnostic than information only about the challenging brand, and the specific product attribute information is more diagnostic than the simple cues regarding brand liking (Baker and Lutz 2000).

Consistent with these findings, the cognitive advertising appeals, which present the objective product attributes, may make the advertising more diagnostic and the comparative information format may increase the diagnosticity of the cognitive advertising appeals. On the contrary, the affective advertising appeals, which present the simple cues regarding brand liking may not make the advertising more diagnostic. In the same vein, the cognitive information content in WOM communication, which describes the objective product attributes, may increase the diagnosticity of WOM communication. However, the affective information content in WOM communication that reports the psychological benefits of a brand may be attributed to person-related reasons, rather than product-related reasons (Laczniak, DeCarlo, and Ramaswami 2001; Newman 2003). As a result, the affective information content in WOM communication, which describes the subjective feeling responses to product consumption experiences, may diminish the diagnosticity of WOM communication.

Furthermore, according to the accessibility-diagnosticity model, the cognitive information content and the comparative information format in negative WOM communication, which present the superiority of a brand over another in term of product attributes, may make it more diagnostic than the cognitive information content and the noncomparative information format, which present the product attributes only about the challenging brand. In previous studies regarding the comparative information format in ad, advertisements were manipulated with the cognitive appeals only. The review of previous research on the comparative information format in advertising demonstrated that the cognitive advertising appeals in a comparative information format often strengthen the effects of advertising on attitudes (Belch 1981; Gorn and Weinberg 1984; Grewal et al. 1997). For example,

Chang's (2007) study found that consumers tend to carefully process the advertising appeals in a comparative information format since those are perceived to be more helpful and diagnostic. A couple of empirical studies have showed that a challenging brand was more closely anchored to a leading brand through a comparative format in advertising (Droge 1989; Droge and Darmon 1987).

Consistent with these findings, cognitive advertising appeals in a comparative information format may create more positive brand attitude than those in a noncomparative information format since the challenging brand is believed to have the favorable product attributes as the leading brand. Likewise, due to its stronger diagnosticity, the cognitive information content and the comparative information format in negative WOM communication may generate more negative attitudes toward a product than the cognitive information content and the noncomparative information format in negative WOM communication.

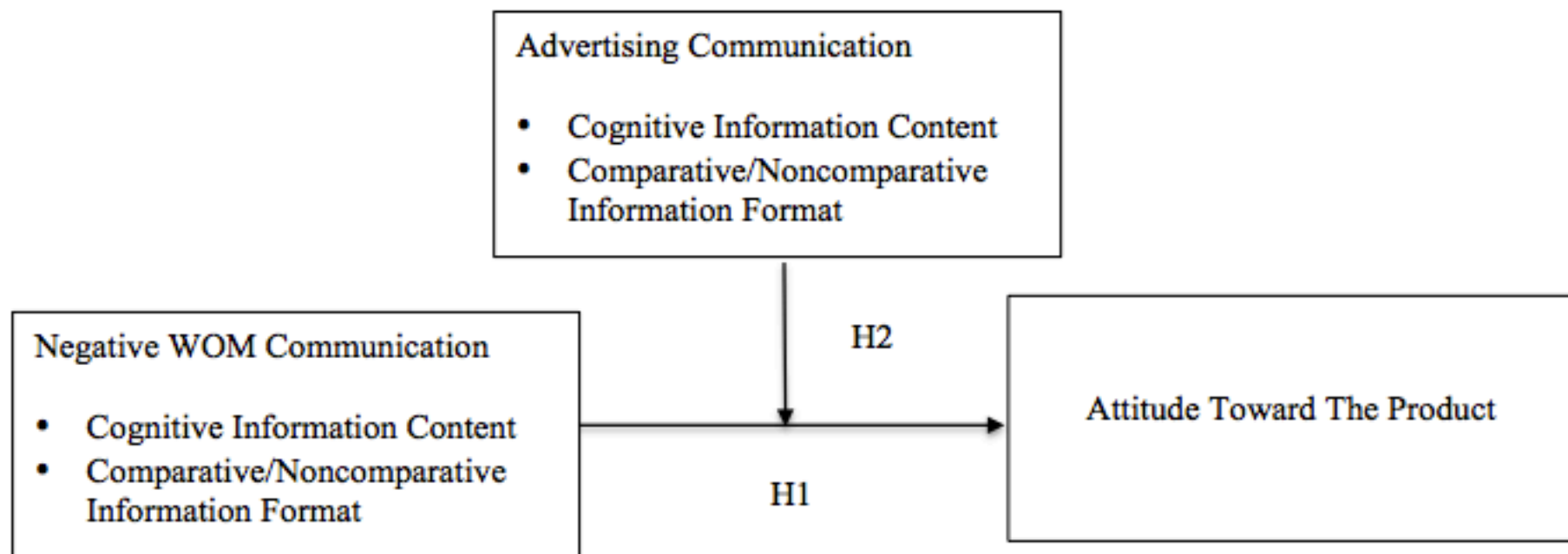
As discussed earlier, the affective information content in WOM communication may discount the diagnosticity of WOM communication because it depicts the subjective feelings of using a product. For the same reason, the comparative information format may not improve diagnosticity of affective WOM communication. Consequently, the affective information content and the comparative information format in negative WOM communication may not generate more negative attitudes toward a product than the affective information content and the noncomparative information format in negative WOM communication.

CHAPTER 3: PROPOSED RESEARCH MODEL AND HYPOTHESES

Proposed Research Model 1

The current dissertation aims to examine the effects of different types of negative WOM communication, and the interaction effects of negative WOM and advertising communications on consumer attitudes. Based on the foregoing review of literature, four hypotheses and two research models are developed. In order to more precisely specify the variables, some abbreviations are used in this research. The conceptual model of negative cognitive WOM and cognitive advertising communication is presented in Figure 1.1.

Figure 1.1: Proposed Research Model 1 - The Impact of NWOM_{cc} vs. NWOM_{nc} on Consumer Attitudes



Hypotheses I

According to the ELM, the cognitive information content in WOM communication should be processed carefully. The cognitive information content in negative WOM communication should be accessible. Additionally, negative information is diagnostically evident in the communication environment (Feldman and Lynch 1988; Lynch, Marmorstein and Weigold 1988). Substantial studies have shown that negative WOM communication has a strong impact on consumer attitudes (e.g., Arndtz 1967; Chevalier and Mayzlin 2006; Herr, Kardes, and Kim 1991; Laczniak, DeCarlo, and Ramaswami 2001; Richins 1983).

Petty and Cacioppo (1986) found that messages in a comparative information format are processed more carefully than those in a noncomparative information format because consumers are motivated to involve themselves in processing comparative information. This study examined the cognitive level of responses to cognitive information processing. As a consequence of more cognitive efforts to process, negative WOM communications that contain cognitive information content in a comparative information format ($NWOM_{cc}$) will be more accessible than negative WOM communications that contain cognitive information content in a noncomparative information format ($NWOM_{nc}$).

In addition, according to Feldman and Lynch's (1988) accessibility-diagnostics framework, information in a comparative information format is more diagnostic for judgment than in a noncomparative information format. $NWOM_{cc}$ may be more diagnostic than $NWOM_{nc}$ since comparative information format can effectively distinguish a challenging brand from a leading brand by product attributes. As a result,

NWOM_{cc} may have a greater effect on Attitude toward the Product than NWOM_{nc}.

Therefore,

H1: NWOM_{cc} will lead to a more negative Attitude toward the Product than NWOM_{nc}.

Smith and Vogt's (1995) found that advertising communications reduced the harmful effects of negative WOM communications. It is still questionable how different types of advertising communications are able to diminish the damage of different types of negative WOM communications. From the perspective of information content and information format, I will elaborate on the interaction effects between negative WOM and advertising communications on consumer attitudes.

Negative information is processed more carefully and has a greater impact on consumer attitudes than positive information (e.g., Arndt 1967; Mizerski 1982). In general, WOM communication is considered as more credible than advertising communication because WOM communication sender is believed to have not a vested interest in promoting the product. Consequently, negative WOM communication may be processed more carefully and be more accessible than advertising communication. Consumers may give more weight to negative WOM communication as they receive information from both sources.

According to ELM (Petty and Cacioppo 1986), cognitive information is likely to be processed centrally. In addition, Droge (1989) noted that advertising claims in a comparative information format tend to be processed centrally, while advertising claims in a noncomparative format tend to be processed peripherally. As such, advertising communications that encompass cognitive information in a comparative

information format (Ad_{cc}) may be more accessible than advertising communications that encompass cognitive information in a comparative information format (Ad_{nc}).

Likewise, $NWOM_{cc}$ should be more accessible than $NWOM_{nc}$ because cognitive information in a comparative information format prompts higher level of elaboration processing.

Furthermore, according to the accessibility-diagnostics framework, negative information is perceived more diagnostic than positive information (Feldman and Lynch 1988; Lynch, Marmorstein, and Weigold 1988), and thereby negative cognitive WOM communications should be more diagnostic than cognitive advertising communications. $NWOM_{cc}$ will have a stronger impact on consumer attitudes than Ad_{cc} and Ad_{nc} . In the same vein, $NWOM_{nc}$ will have a stronger impact on consumer attitudes than Ad_{cc} and Ad_{nc} .

Based on Kelley's (1967) attribution theory, consumers spontaneously make causal inferences to explain the reasons why negative WOM communications happen. The cognitive information content in negative WOM communication should be attributed to product-related reasons because it describes product attributes. Both of $NWOM_{cc}$ and $NWOM_{nc}$ that are concerned with product attributes should be attributed product failure to product-related reasons.

Moreover, Laczniak, DeCarlo, and Ramaswami (2001) found that negative WOM receiver's attribution depends on the manner in which negative WOM communication is persuaded. $NWOM_{cc}$ may have higher level of diagnosticity than $NWOM_{nc}$ since the former can help consumers to identify the differences on product performance

between a challenging brand and a leading brand (Feldman and Lynch 1988). As the result of higher level of diagnosticity, $NWOM_{cc}$ is more likely to have a greater impact on consumer attitudes than $NWOM_{nc}$. Similarly, Ad_{cc} may be more diagnostically evident than Ad_{nc} since the former is able to distinguish between a challenging brand and a leading brand on product attributes (Wilkie and Farris 1975). Consequently, Ad_{cc} is more likely to have a greater impact on consumer attitudes than Ad_{nc} . When consumers receive the inconsistent information from different sources, they integrate the information and give a weight to each piece of information to form an attitude (Anderson 1971; Smith 1993; Smith and Swinyard 1982). Hence, different types of information may be given different weights in judgment. Ad_{nc} may be given a less weight on judgment than Ad_{cc} when consumers receive negative cognitive WOM and cognitive advertising communications.

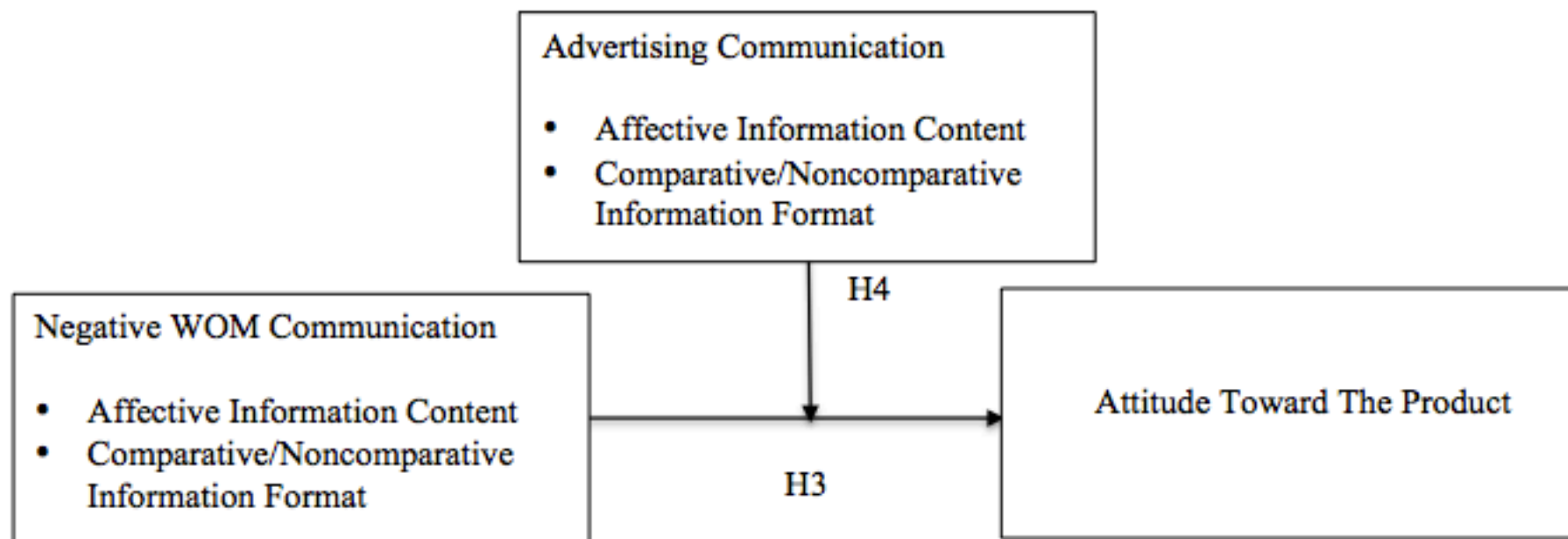
Due to the differences in the accessibility and diagnosticity, $NWOM_{cc}$ and $NWOM_{nc}$, as well as Ad_{cc} and Ad_{nc} may have disproportionate influences on consumer attitude toward the product. According to the ELM, consumers may be more involved in processing the inconsistent information between $NWOM_{cc}$ and Ad_{cc} than those between $NWOM_{cc}$ and Ad_{nc} since Ad_{cc} is perceived as more diagnostic than Ad_{nc} . Ad_{cc} may attenuate the detrimental effects of $NWOM_{cc}$ on Attitude toward the Product more effectively than Ad_{nc} . In addition, when consumers receive $NWOM_{nc}$ and Ad_{cc} , Ad_{cc} might be perceived as less diagnostic because the inconsistent information between the two sources becomes more salient and $NWOM_{nc}$ has more credibility. When integrating $NWOM_{nc}$ with cognitive advertising, Ad_{nc} may create a more favorable attitude toward the product than Ad_{cc} . Therefore,

H2: Cognitive advertising will moderate the effects of NWOM on attitude toward the product. That is, individuals who are exposed to NWOM_{cc} and Ad_{cc} will develop a more favorable Attitude toward the Product than individuals who are exposed to NWOM_{cc} and Ad_{nc}, while individuals who are exposed to NWOM_{nc} and Ad_{nc} will develop a more favorable Attitude toward the Product than individuals who are exposed to NWOM_{nc} and Ad_{cc}.

Proposed Research Model 2

As discussed earlier, consumers may evaluate products based on affective responses to product consumption experiences. Thus, negative WOM communications should contain either cognitive or affective information content, rather than cognitive information only in previous research. Much research has exclusively examined negative cognitive WOM communications. However, very little research has devoted to advance our understanding of the affective information content in negative WOM communications. It is rational to expect that the affective information content in negative WOM communications have different effects on attitudes toward the product than the cognitive information content. The persuasive effects of the affective information content in WOM would be important to an in-depth understanding about negative WOM communications and whether certain variables that marketers control can be used to manage the negative WOM events. The conceptual model of negative affective WOM and affective advertising communication is presented in Figure 1.2.

Figure 1.2: Proposed Research Model 2 - The Impact of NWOM_{ca} vs. NWOM_{na} on Attitude toward The Product



Hypotheses II

According to the attribution theory (Kelley 1967), consumers attribute reasons for generating negative WOM when they receive negative WOM communications.

Laczniak, DeCarlo, and Ramaswami (2001) found that negative WOM communications have less impact on consumer attitudes if negative WOM events are attributed to non-product reasons. The affective information content in negative WOM communication, which describes consumers' feeling responses to their product consumption experiences, is most likely to be attributed to person-related reasons, rather than product-related reasons. If consumers receive negative affective WOM communications, the attributions based on person-related reasons may lead to the lower level of blame for the product problem than those based on product-related reasons.

The attributes based on person-related reasons are less important than the attributions based on product-related reasons. If negative comparative affective WOM communications ($NWOM_{ca}$) and negative noncomparative affective WOM communications ($NWOM_{na}$) are attributed to person-related reasons, they don't have a great negative effect on consumer attitudes as $NWOM_{cc}$ and $NWOM_{nc}$.

Affective information in a comparative information format may not significantly differentiate between a challenging brand and a leading brand because the comparisons between a challenging brand and a leading brand are built on consumer's feeling responses to product consumption experiences. The affective information content of $NWOM_{ca}$ is most likely to be attributed to person-related reasons, instead of product-related reasons. $NWOM_{ca}$ may be considered as less credible than

NWOM_{na}. As a result, NWOM_{ca} may not have a stronger impact on consumer attitudes than NWOM_{na}.

H3: NWOM_{ca} will lead to a less favorable Attitude toward the Product than NWOM_{na}.

WOM communications are characterized by informal and personal conversations about product, service and/or its seller. The affective information content in negative WOM communications describes consumers' feeling responses to product consumption experiences. The affective information content in advertising communication is manipulated by a series of executional elements to arouse consumer's feelings or emotions (Puto and Wells 1984). As such, compared to the affective information content in negative WOM communication, the affective information content in advertising communication is more emotionally vivid and interesting to communicate the affective benefits of using a product.

Positive affective information is more accessible than negative affective information since the former is more likely to catch attention and be retrieved from memory than the latter (DeWall and Baumeister 2007). Correspondingly, the affective information content in advertising communication should be more accessible than the affective information content in negative WOM communication. The accessibility of the information greatly influences its persuasive effects (Feldman and Lynch, 1988).

Hence, affective advertising may exert more influence on Attitude toward the Product than negative affective WOM communication. When consumers receive negative affective WOM and affective advertising, affective advertising will be weighted more heavily and play a dominant role in shaping consumer attitudes.

According to the attribution theory, the differences between a challenging brand and a leading brand may not be diagnostically evident when the comparison is built upon subjective affective evaluations. As such, $NWOM_{ca}$ and $NWOM_{na}$ should be low of diagnosticity. Likewise, advertising communication that contains affective information content and noncomparative information format (Ad_{na}) and advertising communication that contains affective information content and comparative information format (Ad_{ca}) should have a low diagnosticity.

When consumers receive $NWOM_{ca}$ and Ad_{ca} , Ad_{ca} might be perceived as less credible because the inconsistent information between the two sources becomes more salient and $NWOM_{ca}$ has more credibility. Therefore, when integrating $NWOM_{ca}$ with affective advertising, Ad_{na} will create a more favorable consumer attitudes than Ad_{ca} . In addition, when consumers receive $NWOM_{na}$ and Ad_{ca} , Ad_{ca} might be perceived as more diagnostic since the inconsistent information between the two sources becomes more salient and Ad_{ca} plays a key role in shaping consumer attitudes. Thereby, when consumers receive $NWOM_{na}$ and affective advertising, Ad_{ca} will create more favorable consumer attitudes than Ad_{na} . Therefore,

H4: Affective advertising will moderate the effects of $NWOM$ on Attitude toward the Product. That is, individuals who are exposed to $NWOM_{ca}$ and Ad_{na} will develop a more favorable Attitude toward the Product than individuals who are exposed to $NWOM_{ca}$ and Ad_{ca} , while individuals who are exposed to $NWOM_{na}$ and Ad_{ca} will develop a more favorable Attitude toward the Product than individuals who are exposed to $NWOM_{na}$ and Ad_{na} .

CHAPTER 4: EXPERIMENT 1

Participants and Experimental Design

Experiment 1 employed a two-factor design. The treatment conditions consisted of cognitive NWOM (NWOM_{cc} and NWOM_{nc}) and cognitive advertising (Ad_{cc} and Ad_{nc}). To test H1 and H2, a 2 cognitive NWOM x 2 cognitive Ad mixed design was used. Our goal is to demonstrate if NWOM_{cc} leads to a more negative Attitude toward the Product than NWOM_{nc}, and which type of advertising tactics can be used to reduce the damaging effects of cognitive NWOM communication more effectively.

University students participated in experiment 1 in exchange for extra credit points. Students were randomly assigned to one of the four experimental designs and they were told that the purpose of this study was to explore consumer responses to brand and product information as they were exposed to a negative cognitive WOM statement, and then, they were informed to turn to the next page to review an advertisement as they finished the WOM statement.

Stimuli and Procedure

Product selection

The test product chosen for experiment 1 is comfort bicycle for commuting with price range of two hundred to six hundred. The choice of a stimulus product in experiment 1 is based on the following two criteria: 1) participants would use and purchase the product; 2) participants may seek other consumer's opinions about the product (Mizerski 1982). Comfort bicycle was chosen as the product category because it is a common WOM product for students. University students may need a comfort bicycle and would seek information from others as they make a bike purchase decision.

Students tend to assess comfort bicycles based on product features, which fits with experiment 1 with two negative cognitive WOM (WOM_{cc} versus WOM_{nc}) and two cognitive Ad factors (Ad_{cc} versus Ad_{nc}). Two fictitious brands, which include a challenging brand and a leading brand, were created to avoid confounding effects caused by brand familiarity and prior attitudes toward the brands. The challenging brand was named Ritallo, and the leading brand was named Brizo.

Recent research models on WOM communications have been tested by self-reports in surveys since it is difficult to observe traditional face-to-face WOM communications (Trusov, Bucklin, and Pauwels 2009). Prior research has provided evidence that online consumer generated reviews are ideal to investigate the messages in WOM communications (Dellarocas, Awad, and Zhang 2004; Godes and Mayzlin 2004). Dellarocas, Awad, and Zhang (2004) identified that e-WOM communications are similar to the face-to-face WOM communications recorded through surveys. Thus, consumer generated reviews about products or services can be used to examine different types of information in WOM communications.

The web pages in experiment 1 were created based on the web pages of bicycle stores in the aid of graphic design software. Similarly, the advertisements in experiment 1 were developed based on the advertisements for comfort bicycle. Based on consumer's reviews about comfort bicycle at Amazon.com, seven major product attributes of comfort bicycle were chosen: easy to assemble, light weight, comfortable riding experience, variety of models/sizes, easy to maintain, product features, and high speed. Among those, the four important product attributes (i.e., easy to assemble,

light weight, comfortable riding experience, and easy to maintain) were identified and confirmed in the pretest among a convenience sample of students.

Experimental Procedure

The research model of experiment 1 was tested by NWOM_{cc} and Ad_{cc}; NWOM_{cc} and Ad_{nc}; NWOM_{nc} and Ad_{cc}; and NWOM_{nc} and Ad_{nc}. The NWOM_{cc}, NWOM_{nc}, Ad_{cc}, and Ad_{nc} experimental designs presented major product attributes (see Appendix 1, 2, 3 and 4). In the NWOM_{cc} and Ad_{cc} experimental designs, Ritallo bike was directly compared with Brizo bike. In contrast, the NWOM_{nc} and Ad_{nc} experimental designs didn't address any information about Brizo bike, the leading brand.

Independent Variables

NWOM_{cc} vs. NWOM_{nc}

The manipulation for the comparative information format in NWOM_{cc} statement was checked in experiment 1 by a yes/no question. Participants provided their response on the consumer review about a comfort bicycle, on a 15-point Likert scale, ranging from -7 to +7 (Boonthanom 2004; Wetzer, Zeelenberg, and Pieters 2007). The manipulation check questions for the cognitive information content in the negative WOM communication were adopted from Chaudhuri and Buck (1995), which included six items on a 7 point scale from "Not at all" and 7 to "Very much". The items included the following: 1) Did the consumer review make you think of real differences between Ritallo and Brizo?; 2) Did the consumer review make you think of reasons for Ritallo's superiority?; 3) Did the consumer review make you think of the pros and cons of Ritallo? 4) Did the consumer review make you "think" rather

than “feel”?; 5) Did the consumer review make you think of arguments for using or not using Ritallo?.

Ad_{cc} vs. Ad_{nc}

The manipulation for the comparative information format in Ad_{cc} was checked in experiment 1 by a yes/no question. The manipulation check questions for the cognitive information content in the advertising communication were borrowed from Chaudhuri and Buck (1995), which included six items on a 7 point scale from “Not at all” and 7 to “Very much”. The scale is anchored as follows: 1) Did the ad make you think of real differences between Ritallo and Brizo?; 2) Did the ad make you think of reasons for Ritallo’s superiority?; 3) Did the ad make you think of the pros and cons of Ritallo?; 4) Did the ad make you “think” rather than “feel”?; 5) Did the ad make you think of arguments for using or not using Ritallo?.

Dependent Variable

Attitude toward the Product The principal dependent variable is Attitude toward the Product. The measurement of Attitude toward the Product was adopted from MacKenzie and Lutz (1989), which included four items and were measured on a 7-point scale. The questions for Attitude toward the Product included: “What is your overall evaluation of Ritallo? 1) Dislike - Like; 2) Negative - Positive; 3) Useless - Useful; 4) Unfavorable- Favorable”. The mean of the determinants of Attitude toward the Product is used to represent the overall measure.

Results

Pretest Results

Three pretests, consisting of a total of 137 participants, were utilized in the design of the stimulus material and questionnaire for experiment 1.

In the first pretest, a group of 41 participants was used to determine whether the claim focused on the important attributes. Participants were given the following instructions: “Imagine you are going to buy a new bicycle. Please rate how important each attribute is to you when you first consider purchasing a commuting bicycle on commuterbikestore.com”.

The importance of the product attributes featured in the WOM statements and advertisements was assessed on a seven-point scale, ranging from unimportant (1) to important (7). The results suggest that four product attributes are considered to be important. The mean importance ratings for comfortable riding experience, lightweight, easy to maintain, and easy to assemble were 6.5854, 6.1707, 6.0732, and 5.6341, respectively.

The second pretest (N=51) included the proposed NWOM_{cc} and NWOM_{nc} statements for negative messages, comparative/noncomparative information format, and cognitive information content in WOM. Participants were asked to identify the negative information in the NWOM_{cc} and NWOM_{nc} statements on a 15-point Likert scale, ranging from -7 to +7. The scale is anchored as follows: strongly negative (-7) and strongly positive (7). Participants who viewed the NWOM_{cc} statement recognized the negative information in the WOM communication ($M = -3.73$, $SD = 3.10$) and

participants who viewed the NWOM_{nc} statement recognized the negative information in the WOM communication ($M = -3.84$, $SD = 1.77$). 92% of participants who viewed the NWOM_{cc} statement recognized the comparative information format of the WOM communication. In addition, a one-sample t test was performed to check the manipulations for cognitive information content in NWOM_{cc} and NWOM_{nc}. The means of cognitive information content in NWOM_{cc} significantly differed from the mean of affective information content in NWOM_{ca} ($M_{NWOM_{cc}} = 5.04$, $M_{NWOM_{ca}} = 4$, $t = 4.19$, $p = .00$); and the means of cognitive information content in NWOM_{nc} significantly differed from the mean of affective information content in NWOM_{na} ($M_{NWOM_{nc}} = 4.79$, $M_{NWOM_{na}} = 4$, $t = 2.58$, $p = .02$). As such, the manipulations for cognitive information content in NWOM_{cc} and NWOM_{nc} are effective.

The third pretest ($N = 45$) included the proposed Ad_{cc} and Ad_{nc} appeals for the cognitive information content and the comparative information format.

A one-sample t test was performed to check the manipulations for cognitive information content in Ad_{ca} and Ad_{na}. The results suggested that the means of cognitive information content in Ad_{cc} significantly differed from the mean of affective information content in Ad_{ca} ($M_{Ad_{cc}} = 4.98$, $M_{Ad_{ca}} = 4$, $t = 4.07$, $p = .00$); and the means of cognitive information content in Ad_{nc} significantly differed from the mean of affective information content in Ad_{na} ($M_{Ad_{nc}} = 4.70$, $M_{Ad_{na}} = 4$, $t = 2.64$, $p = .02$). Therefore, the manipulations for cognitive information content in Ad_{cc} and Ad_{nc} are effective. 95.8% of participants who viewed the Ad_{cc} appeals agreed that the advertising appeals were presented in a comparative information format.

Main Study Results

The sample consisted of 99 usable responses once responses from participants who had not participated in one or more of the pretests. Participant age ranged from 19-40 years, $M=21.53$, $SD= 2.63$. 47.5% ($N=47$) were female and 52.5% ($N=52$) were male.

Reliability Analysis

Attitude toward the Product were measured using four items measured on a 7-point scale with endpoints of dislike-like, very negative -very positive, useless-useful, very unfavorable-very favorable (MacKenzie and Lutz 1989). In experiment 1, the Cronbach's alpha for attitude toward the product was 0.93.

Manipulation Checks

The manipulation checks for the comparative information format in negative WOM communication and in advertising communication were performed and the manipulations worked as planned. 97.4% of participants who viewed the $NWOM_{cc}$ statement recognized its comparative information format. 96.0% of participants who viewed the Ad_{cc} appeals recognized its comparative information format.

Hypothesis Testing

To test the Hypotheses of experiment 1, a two-way ANOVA was performed with Attitude toward the Product as the dependent variable. Hypothesis 1 proposed that $NWOM_{cc}$ will lead to a more negative Attitude toward the Product than $NWOM_{nc}$. The results showed that there was no significant difference between the effects of $NWOM_{cc}$ and $NWOM_{nc}$ on Attitude toward the Product ($MNWOM_{cc}=4.95$,

$MNWOM_{nc}=4.99$, $F=.05$, NS). Therefore, H1 was rejected. See Table 2-1 for statistical test results.

Hypothesis 2 proposed that cognitive advertising will moderate the relationship between negative cognitive WOM and Attitude toward the Product. The results of experiment 1 also showed that cognitive advertising moderated the effects of negative cognitive WOM on Attitude toward the Product ($p=.00$). Therefore, Hypothesis 2 was supported. Participants who viewed $NWOM_{cc}$ and Ad_{cc} developed a more favorable Attitude toward the Product than participants who viewed $NWOM_{cc}$ and Ad_{nc} ; participants who viewed $NWOM_{nc}$ and Ad_{nc} developed a more favorable Attitude toward the Product than participants who viewed $NWOM_{nc}$ and Ad_{cc} . Table 2-2 reports the mean and the statistical significance. Graphical representation of the interaction effect is depicted in Figure 2-1.

Discussion

When consumers increasingly receive information about product performance from both of WOM and advertising sources in today's communication environment, this study hoped to learn more about the effects of negative WOM communications on consumer attitudes and the variables which marketers can control to be applied to manage negative WOM communications which are generally out of the control of marketers. The purpose of experiment 1 was to examine the effects of $NWOM_{cc}$ and $NWOM_{nc}$ on Attitude toward the Product, and the moderating effects of cognitive advertising on the relationship between negative cognitive WOM and Attitude toward the Product that had not been scrutinized in one single study yet. Attitude toward the

Product was chosen as a dependent variable because of its relationship to consumer's purchase decision and its role to the management of negative WOM events.

Using the Elaboration Likelihood Model (Petty and Cacioppo 1981; 1986) and the accessibility-diagnostics model (Feldman and Lynch 1988) as a foundation, the differential effects of negative cognitive WOM and the moderating effects of cognitive advertising on the relationship between negative cognitive WOM and consumer attitude seemed probable. According to the ELM, the cognitive information from both sources is considered to be central cues, which of these two would be attributed to product-related attributes. This would be helpful to understand the mechanism in which different types of negative cognitive WOM communications have different effects on consumer attitude and cognitive advertising moderates the effects of negative cognitive WOM on attitude toward the product.

The findings demonstrate that information format in which negative cognitive WOM communication is delivered affects consumer attitudes. These findings may suggest that the comparative information format may increase the weight of cognitive information content in consumer's judgment. The findings are consistent with comparative advertising in past research, which examined only cognitive advertising appeals in a comparative information format. These findings also show that comparative information format may not increase the negative effects of negative cognitive WOM communication.

The data analyzed has provided evidence for Hypothesis 2. There was a significant interaction between negative cognitive WOM and cognitive advertising communication. Previous research has examined the effects of advertising communications on consumer attitudes with a limiting condition, by which the subjects were only given product information from advertising communication. However, consumers are more likely to receive product information from other sources in the real marketplace and actively access to the information from negative WOM communications. A couple of researchers (Anderson 1971; Smith 1993; Smith and Swinyard 1982) developed the integrated information response model to explain consumer's responses in such condition. They suggest that consumers integrate the inconsistent information from different sources and weight each piece of information to form an attitude. The results of the moderating effects indicated that when $NWOM_{cc}$ communication occurs, Ad_{cc} should be applied to reduce the damage of negative WOM. Conversely, when $NWOM_{nc}$ communication occurs, Ad_{nc} should be applied to reduce the damage of negative WOM.

Overall, the results of this study didn't show evidence that cognitive information content in a comparative information format is more diagnostic than the one in a noncomparative information format, and produce a stronger effect on consumer attitude. Therefore, $NWOM_{cc}$ may not produce more negative brand thoughts than $NWOW_{nc}$, while Ad_{cc} tends to create more positive brand thoughts than Ad_{nc} . In fact, many advertisements are intended to develop favorable consumer attitudes without considering negative WOM communications. At the same time, many marketing actions are devoted to lessen the detrimental effects of negative WOM communications, not responding with advertising tactics. Based on the findings of the

present research, marketers scrutinizing the negative WOM communications about their brand would certainly evaluate the consumers' response to it and ensure the advertising tactics can effectively diminish the damaging effects of negative WOM communications on attitudes in order to develop a favorable attitude toward the product.

Using the ELM and the accessibility-diagnostics model as a theoretical framework, the next experiment sheds light on negative affective WOM and affective advertising communications. In particular, it examined the effects of negative affective WOM communications and the moderating effects of affective advertising communications on the relationship between negative affective WOM and Attitude toward the Product. The findings of experiment 2 can be used to explain the effects of $NWOM_{ca}$ and $NWOM_{na}$ and the moderating effects of advertising tactics on the effects of affective $NWOM$ on consumer attitudes.

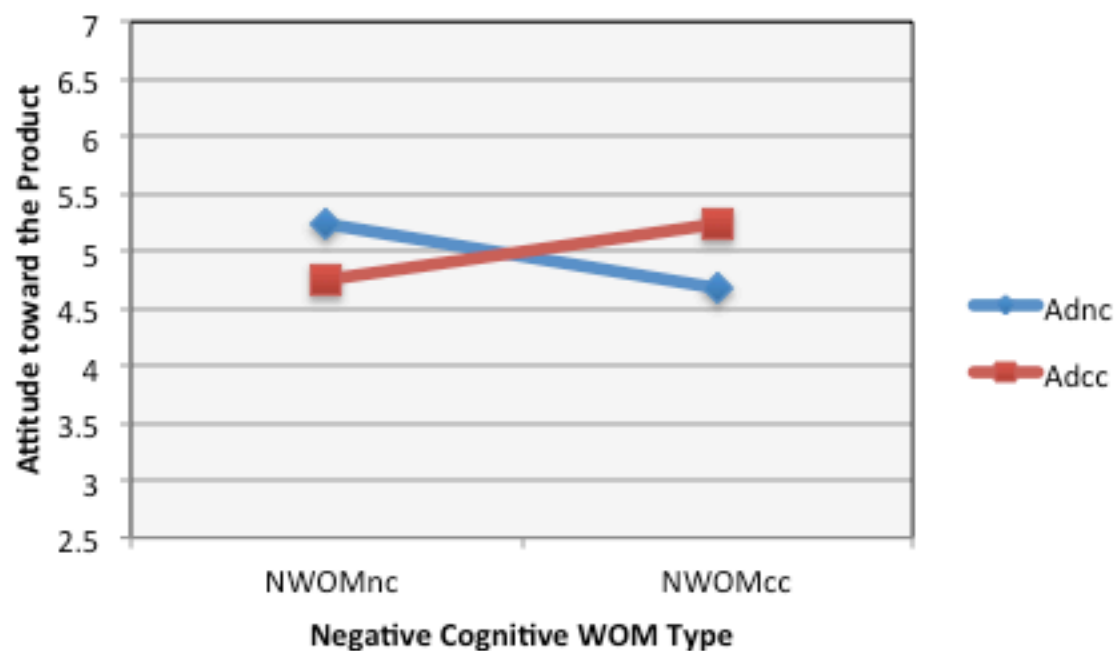
Table 2-1: Statistical results for hypothesis 1

Dependent Variable	NWOM _{cc}	NWOM _{nc}	p-value
Attitude toward the Product	4.95 (.86)	4.99 (1.12)	<i>NS</i>

Table 2-2: Statistical results for hypothesis 2

	NWOM _{cc}		NWOM _{nc}		p-value
Dependent Variable	Ad _{cc}	Ad _{nc}	Ad _{cc}	Ad _{nc}	
Attitude toward the Product	5.23 (.98)	4.67 (.75)	4.75 (.87)	5.23(.90)	.00

Figure 2-1: The Interaction Effect of NWOM and Ad on Attitude toward the Product



CHAPTER 5: EXPERIMENT 2

Participants and Experimental Design

Experiment 2 focused on negative affective WOM communication and investigated the impact of negative affective WOM communication on consumer attitudes and the interaction effects of negative affective WOM and affective advertising communication on consumer attitudes. Experiment 2 involved a 2 affective NWOM (NWOM_{ca} versus NWOM_{na}) x 2 affective Ad (Ad_{ca} vs. Ad_{na}) mixed factorial design. To test Hypothesis 3 and 4, a 2 affective NWOM x 2 affective Ad mixed design was applied. Experiment 2 was designed to identify if NWOM_{ca} will generate a less favorable Attitude toward the Product than NWOM_{na}, and which type of advertising tactics can be used to lower the detrimental effects of affective NWOM communication more effectively.

University students participated in experiment 2 for extra credit points. They were randomly assigned to one of the four experimental designs. Participants were told that the purpose of the experiment was to explore consumer responses to brand and product information as they were exposed to a negative WOM statement, and then, they were informed to turn to the next page to review an advertisement as they finished the negative WOM statement.

Stimuli and Procedure

Product selection

In experiment 2, deodorant was used as the test product, with price range of five to twenty. The stimulus product for experiment 2 was chosen because of the following

two principles: 1) participants would use and purchase the product; 2) participants may seek other consumer's opinions about the product (Mizerski 1982). Deodorant was chosen as the product category because university students may buy their own deodorant and pass on information about the deodorant that they use. Deodorant is concerned by students since they want their friends to like them better and they evaluated a deodorant based on their affective responses to the product consumption experiences, which fits with experiment 2 involving Ad_{ca} , and Ad_{na} . Two fictitious brands including a challenging brand and a leading brand were created to avoid confounding effects caused by brand familiarity and prior attitudes toward the brands. The challenging brand was named Solex, and the leading brand was named Louison.

The negative WOM statements in experiment 2 were created based on the web pages of personal care stores in the aid of graphic design software. Likewise, the advertisements in experiment 2 were developed based on the advertisements for deodorant.

Experimental Procedure

The research model of experiment 2 was tested by $NWOM_{ca}$ and Ad_{ca} ; $NWOM_{ca}$ and Ad_{na} ; $NWOM_{na}$ and Ad_{ca} ; and $NWOM_{na}$ and Ad_{na} . The experimental designs of $NWOM_{ca}$, $NWOM_{na}$, Ad_{ca} , and Ad_{na} presented the affective responses to the consumption experience of a deodorant respectively (see Appendix 5, 6, 7, and 8). The comparisons between two brands in both $NWOM_{ca}$ and Ad_{ca} were based on affective responses to the product consumption experiences (see Appendix 5 and 7). The graphic elements of the product were identical across the Ad_{ca} and Ad_{na} . The

graphic elements were partially identical across the Ad_{ca} and Ad_{na} experimental design since executional elements are used to facilitate comparison on affective responses.

Independent Variables

NWOM_{ca} vs. NWOM_{na}

The manipulation for the comparative information format in NWOM_{ca} communication was checked by a yes/no question. Participants provide their response on the consumer review about a deodorant, on a 15-point Likert scale, ranging from -7 to +7 (Boonthanom 2004; Wetzer, Zeelenberg, and Pieters 2007). The manipulation check questions for the affective information content in negative WOM communication were adopted from Chaudhuri and Buck (1995), which included six items on a 7 point scale from “Not at all” and 7 to “Very much”. The items included the following: 1) Did the consumer review make you think of real differences between Solex and Louison deodorant?; 2) Did the consumer review make you think of reasons for Solex’s superiority?; 3) Did the consumer review make you think of the pros and cons of Solex? 4) Did the consumer review make you “think” rather than “feel”?; 5) Did the consumer review make you think of arguments for using or not using Solex?.

Ad_{ca} vs. Ad_{na}

The manipulation for the comparative information format in Ad_{ca} communication was checked in experiment 2 by a yes/no question. The manipulation check questions for the affective information content in advertising communication were adopted from Chaudhuri and Buck (1995), which included six items on a 7 point scale from “Not at all” and 7 to “Very much”. The scale is anchored as follows: 1) Did the ad make you think of real differences between Solex and Louison?; 2) Did the ad make you think

of reasons for Solex's superiority?; 3) Did the ad make you think of the pros and cons of Solex?; 4) Did the ad make you "think" rather than "feel"?; 5) Did the ad make you think of arguments for using or not using Solex?.

Dependent Variable

Attitude toward the Product Like experiment 1, the principal dependent variable is Attitude toward the Product. The measurement of Attitude toward the Product was borrowed from MacKenzie and Lutz (1989), which included four items and were measured on a 7-point scale. The questions for Attitude toward the Product included: "What is your overall evaluation of Solex? 1) Dislike - Like; 2) Negative - Positive; 3) Useless - Useful; 4) Unfavorable- Favorable". The mean of the determinants of Attitude toward the Product is used to represent the overall measure.

Results

Pretest Results

Two pretests, consisting of a total of 94 participants, were utilized in the design of the stimulus material and questionnaire for experiment 2.

The first pretest (N=50) was used to identify the manipulation for the negative information, the comparative information format, and the affective information content in the proposed NWOM_{ca} and NWOM_{na} statements. Participants were asked to recognize the negative information in the NWOM_{ca} and NWOM_{na} statement on a 15-point Likert scale, ranging from -7 to +7. The scale was anchored as follows: strongly negative (-7) and strongly positive (7). Participants who viewed either the NWOM_{ca} or the NWOM_{na} statement recognized the negative information in WOM

communication ($M = -3.36$, $SD = 2.68$; $M = -3.21$, $SD = 2.43$). 96.2% of participants who viewed the $NWOM_{ca}$ statement recognized the comparative information format in WOM communication. In addition, a one-sample t test was performed to check the manipulations for affective information content in $NWOM_{ca}$ and $NWOM_{na}$. The means of affective information content in $NWOM_{ca}$ were significantly different from the mean of cognitive information content in $NWOM_{cc}$ ($M_{NWOM_{ca}} = 2.28$, $M_{NWOM_{cc}} = 4$, $t = -6.03$, $p = .00$); and the means of affective information content in $NWOM_{na}$ were significantly different from the mean of cognitive information content in $NWOM_{nc}$ ($M_{NWOM_{na}} = 2.44$, $M_{NWOM_{nc}} = 4$, $t = -7.18$, $p = .00$). Therefore, the manipulations for affective information content in $NWOM_{ca}$ and $NWOM_{na}$ are effective.

The second pretest ($N = 44$) included the proposed Ad_{ca} and Ad_{na} for the affective information content and the comparative information format in advertising communications. A one-sample t test was performed to check the manipulations for affective information content in Ad_{ca} and Ad_{na} . The means of affective information content in Ad_{ca} were significantly different from the mean of cognitive information content in Ad_{cc} ($M_{Ad_{ca}} = 2.48$, $M_{Ad_{cc}} = 4$, $t = -5.21$, $p = .00$); and the means of affective information content in Ad_{na} were significantly different from the means of cognitive information content in Ad_{nc} ($M_{Ad_{na}} = 2.26$, $M_{Ad_{nc}} = 4$, $t = -7.34$, $p = .00$). Therefore, the manipulations for affective information content in Ad_{ca} and Ad_{na} are effective. 95.2% of participants who viewed the Ad_{ca} identified the comparative information format in advertising communication.

Main Study Results

The sample consisted of 95 usable responses once responses from participants who had not participated in one or more of the pretests. Participant age ranged from 18-37 years, $M=20.76$, $SD= 2.60$. 47.4% ($N=45$) were female and 52.6% ($N=50$) were male.

Reliability Analysis

Attitude toward the Product was measured using four items measured on a 7-point scale with endpoints of 1) dislike-like, 2) very negative -very positive, 3) useless-useful, and 4) very unfavorable-very favorable (MacKenzie and Lutz 1989). In experiment 2, the Cronbach's alpha for Attitude toward the Product was 0.90.

Manipulation Checks

The manipulation checks for the comparative information format in the WOM and advertising communication were performed and the manipulations worked as planned. 92.0% of participants who viewed the $NWOM_{ca}$ statement recognized the comparative information format in the WOM communication. 95.8% of participants who viewed the Ad_{ca} recognized the comparative information format in the advertising communication.

Hypothesis Testing

To test the Hypotheses of experiment 2, a two-way ANOVA was conducted with Attitude toward the Product on the data. Hypothesis 3 proposed that compared with $NWOM_{na}$, $NWOM_{ca}$ will lead to a less favorable Attitude toward the Product. The results indicated that the effects of $NWOM_{ca}$ and $NWOM_{na}$ on Attitude toward the

Product were not significantly different from each other ($M_{NWOM_{ca}}=4.64$, $M_{NWOM_{na}}=4.83$, $F=.91$, NS). Hypothesis 3 was rejected. See Table 3-1 for statistical test results.

The results of experiment 2 also indicated that affective advertising moderated the effects of negative affective WOM on Attitude toward the Product ($p<.01$). Therefore, Hypothesis 4 was supported. Participants who viewed $NWOM_{ca}$ and Ad_{na} developed a more favorable Attitude toward the Product than participants who viewed $NWOM_{ca}$ and Ad_{ca} ; participants who viewed $NWOM_{na}$ and Ad_{ca} developed a more favorable Attitude toward the Product than participants who viewed $NWOM_{na}$ and Ad_{na} . Table 3-2 reports the statistical significance. Graphical representation of the moderating effect is depicted in Figure 3-1.

Discussion

Although consumers often evaluate products based on their feeling responses to product consumption experiences in WOM communications, previous research has devoted to investigate the persuasive effects of WOM communications limiting to cognitive information content. Current research is not sufficient to advance our understanding of the persuasive effects of negative WOM communication that contains affective information content. This study attempted to give more insights into the effects of negative affective WOM communications on consumer attitudes and certain advertising tactics can be applied to effectively reduce the damage of negative affective WOM communications. The purpose of experiment 2 was to examine the effects of two variables: negative affective WOM communication ($NWOM_{ca}$ vs. $NWOM_{na}$) and affective advertising communication (Ad_{ca} vs. Ad_{na}). The affective information content in a comparative information format had not been scrutinized in

one single study in the field of WOM or advertising communications yet. Attitude toward the Product was chosen as a dependent variable in Experiment 2 for the same reasons as Experiment 1.

According to the Elaboration Likelihood Model (Petty and Cacioppo 1981; 1986) and the accessibility-diagnostics model (Feldman and Lynch 1988), the impact of negative affective WOM communication on consumer attitudes should be different with negative cognitive WOM communication. Likewise, the interaction effects between negative affective WOM and affective advertising communication should exist and be different with those between negative cognitive WOM and cognitive advertising communication. As the ELM proposed, the affective information content from both sources is considered to be peripheral cues, which would be attributed to non-product related attributes. This would be helpful to understand the persuasive effects of negative affective WOM communications and the interaction effects of negative affective WOM and affective advertising communications on consumer attitudes.

The results of Experiment 2 indicated that negative affective WOM communication was perceived as less negative. Specifically, $NWOM_{ca}$ didn't generate more favorable Attitude toward the Product than $NWOM_{na}$. The findings didn't provide evidence that the persuasive effects of $NWOM$ and $NWOM$ are not significantly different.

Consistent with the attribution theory, this finding provided evidence that affective information content will contribute to the positive effects of negative WOM communications on consumer attitudes. This finding didn't show that the comparative information format may have an effect on consumer attitude engendered by negative

affective WOM communications.

The moderating effect outlined in Hypothesis 4 was supported. There was a moderating effect of affective advertising communication on the relationship between negative affective WOM and Attitude toward the Product. As discussed earlier, previous research didn't investigate affective information and comparative information format in one study even though consumers are more likely to evaluate their product consumption experiences and also compare the different brands based on their feeling experiences.

Based on the previous research findings (Anderson 1971; Smith 1993; Smith and Swinyard 1982), when consumers receive negative WOM and advertising communications, they will integrate the consistent information from both sources and each affective information in a comparative or noncomparative information format is given a weight to form an attitude. As discussed earlier, affective advertising communication is more influential than negative affective WOM communication and comparative information format will increase the diagnosticity of affective information content.

Based on the attribution theory, comparative information format will increase the perceived diagnosticity of affective information content. The results of this study didn't indicate that $NWOM_{ca}$ had a greater effect on consumer attitudes than $NWOM_{ca}$. But the results of this study demonstrated that affective $NWOM$ communication had a different impact on consumer attitudes than cognitive $NWOM$ communication, and the interaction effects of negative affective WOM and affective

advertising communication were different than of negative cognitive WOM and cognitive advertising communication.

Though several researchers has mentioned that WOM communications may contain affective information content, little research has yet examined it in the field of negative WOM communications, and it in a comparative information format in one single study which typically occurs in the real marketplace. The integration of information content and information format and the integration of negative WOM and advertising communications are a major contribution of the present dissertation research, and the results suggest that information types in WOM communications are an important research area for more investigation.

Today, almost all the marketers have paid great attention to negative WOM communications and take many marketing actions to minimize the detrimental effects of negative WOM communications. In order to reduce the damage of negative WOM communications, marketers should also examine the type of information content in negative WOM communications and have an in-depth understanding of the persuasive effects of negative WOM communications. The advertising tactic developed in response to negative affective WOM communications has less limiting conditions than to negative cognitive WOM communications.

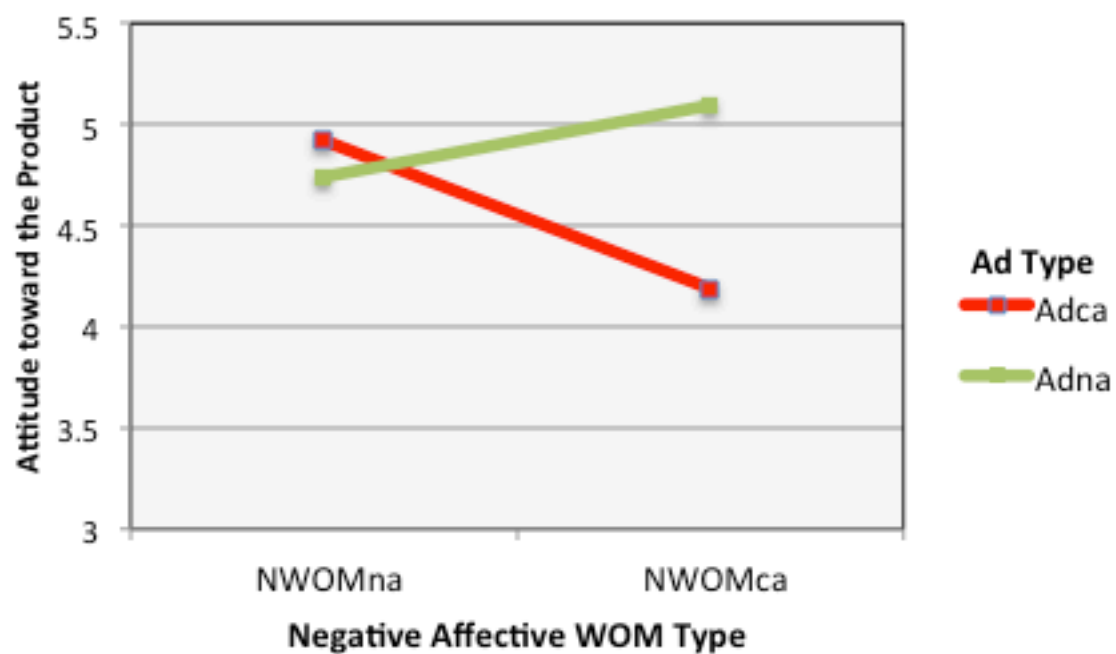
Table 3-1: Statistical results for hypothesis 3

Dependent Variable	NWOM _{ca}	NWOM _{na}	p-value
Attitude toward the Product	4.64 (.68)	4.83 (1.25)	NS

Table 3-2: Statistical results for hypothesis 4

	NWOM _{ca}		NWOM _{na}		p-value
Dependent Variable	Ad _{ca}	Ad _{na}	Ad _{ca}	Ad _{na}	
Attitude toward the Product	4.19 (.82)	5.09 (.90)	4.92 (.68)	4.74 (1.25)	.00

Figure 3-1. The Interaction Effect of NWOM and Ad on Attitude toward the Product



CHAPTER 6: GENERAL DISCUSSION AND FUTURE RESEARCH

Implications

Implications for Theory

The study makes important theoretical implication in negative WOM communication research. It advances our knowledge of different types of negative comparative WOM communication and the interaction effects between negative comparative WOM and advertising communication.

As discussed earlier, a large body of past research focused on the antecedents and consequences of WOM behavior. While some researchers have called for WOM research on different types of information in WOM communications and a couple of recent studies have investigated some types of information in WOM communications, none of these studies have investigated the nature of and the format of messages in negative WOM communications. We lack of knowledge about what and how consumers express their opinions in their product reviews posted on social networking sites and how other consumers process and respond to the different types of negative WOM communications, as well as the interaction between negative WOM and advertising communications.

By integrated analysis of information content and information format, this research introduces a new paradigm for information classification that can be used to systematically investigate the effects of WOM as well as advertising communications. Negative WOM communication may contain cognitive and affective information, and comparative and noncomparative information format since consumers are inclined to

pursue different types of product benefits and compare different brands for the best value. By examining different types of negative WOM communication, this research reveals the mechanism by which negative comparative WOM communication has an effect on consumer attitudes. Furthermore, the study updates our knowledge of affective advertising.

The study extends the ELM and the accessibility- diagnosticity model to WOM research and confirms the practical application of the theories. It enriches the WOM studies by exploring the variability of negative WOM communications. The study demonstrates that the type of information content in negative WOM communication determines its persuasive effects; the type of information format impacts its relative effects. The study also provides evidence that information content and information format in advertising can have an impact on how consumers respond to negative WOM communications.

Implications for Practice

The study also has important practical implications for managing the effects of negative WOM communications. Marketers need to pay more attention to information content and information format in negative WOM communications when negative WOM event occurs since different types of negative WOM communications affect consumer attitudes in different ways.

Prior research has generally suggested traditional marketing strategies, such as excellent service recovery, to avoid or prevent negative WOM communications. This research suggests that marketers should also consider using certain advertising tactic

to diminish the harmful effects of negative WOM communications. Although marketers can't exactly control what consumers tell others about their product experiences, they can monitor information types in negative WOM communications on the social networking sites to design their advertising tactics accordingly. For example, when consumers receive $NWOM_{cc}$, Ad_{cc} may be applied to reduce the detrimental effects of negative cognitive WOM communication on consumer attitudes; when consumers receive $NWOM_{ca}$, affective advertising may be applied to develop favorable effects of negative affective WOM communication on consumer attitudes. As such, it is important to monitor different types of negative WOM communication on social networking sites because of its varying effects on consumer attitude.

Limitations

This study was subject to several limitations. First, the controlled nature of the experiment limits the generalizability of the results. Although the experimental web pages and advertisements were designed based on the real consumer reviews online, the product information was created specifically for student subjects. As a result, the findings of this study may restrict the external validity.

A second limitation involves the use of the artificial brands, webpages and advertisements in this study. Although student participants seemed to review the webpages, the advertisements and the product as the genuine ones based on the comments provided on the questionnaire, both of the experimental designs and the context of exposure to those were artificial. Students were exposed to the print advertising in a packet, instead of accessing to it in a magazine or online. The research technique used in this study didn't perfectly imitate reality.

A third limitation that should be addressed is inadequate negative WOM statements used in the webpages. This study was conducted by providing one negative WOM review. Today, a product is inclined to obtain multiple product reviews online. This may not represent the reality of the information context of negative WOM communication.

Future Research

This research suggests some future research directions. First, the order which participants view negative WOM and advertising communications could be altered. The negative WOM communication was the to be reviewed by subjects before the advertising communication. Negative WOM communication had an effect on consumer attitude prior to advertising communication. Other variables such as memory need to be accounted for to explain the main effects and the interaction effects in this study.

Moreover, consumers often review multiple negative WOM communications on social networking sites. The product information in the multiple negative WOM communications is likely to be inconsistent. It is very interesting, whether is possible, consumers may give different weight to each piece of information, inconsistent information of some negative WOM communications, or only certain negative WOM statement in judgment.

Finally, future studies could also investigate the comparative information format in negative WOM communications cross cultures. Past research has suggested that the cultural values may moderate the relationship between comparative advertising and

brand attitudes. It would be also interesting to investigate the effects of negative comparative WOM and advertising communications in an individualist culture and a collectivist culture. Another possible direction that researchers could explore is using additional independent variables, such as product involvement.

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APPENDICES

APPENDIX 1: NWOM_{cc} STIMULUS

Ritallo M305



Mouse over image to zoom [View Larger »](#)

More Details



You May Also Like...



[2010 GT Tachyon 3.0 Comfort Bike](#)
Sale: \$349.00



[GT ZuM Commuter Bike - Performance Exclusive](#)
Sale: \$255.00



[2010 GTw Tachyon 3.0 Women's Comfort Bike](#)
Sale: \$289.00

Sale: \$299.00

[Sizing Chart »](#)

Select:

Select an Item.....

Quantity:

1

[Add to Cart!](#)

[Save to Wish List »](#)

Features

Specs

Customer Reviews

Displaying reviews 1-3 [Back to top](#)

1.0 out of 5 stars **Some basics**

By College Student from Irvine, CA
About Me: Commuter

I recently bought a Ritallo to get around campus. The Ritallo looks pretty cool. However, the bike came unassembled. I owned a Brizo before. Compared to the Brizo, the Ritallo took me more than an hour to assemble. When wet, the Brizo brakes have better stopping power than the Ritallo brakes. The Ritallo bike is a bit heavier than the Brizo and I have to use more energy going up hills. After just a couple of months of use, I started hearing a clicking noise in the gears of my Ritallo. I took them apart, re-greased them, and re-assembled the bike. The sound went away. Before I bought my new Ritallo, I had a Brizo for two years and found it was easier to maintain.

APPENDIX 2: NWOM_{nc} STIMULUS

Ritallo M305



Sale: \$299.00

[Sizing Chart »](#)Select: Quantity: [Add to Cart!](#)[Save to Wish List »](#)[Features](#)[Specs](#)[Customer Reviews](#)[Mouse over image to zoom](#) [View Larger »](#)

More Details



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-  [2010 GT Tachyon 3.0 Comfort Bike](#)
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Sale: \$255.00
-  [2010 GTw Tachyon 3.0 Women's Comfort Bike](#)
Sale: \$289.00

Displaying reviews 1-3 [Back to top](#)**1.0 out of 5 stars Some basics**

About Me: College Student from Irvine, CA

I purchased a Ritallo to get around campus. The Ritallo looks pretty cool. However, the bike came unassembled. It took me more than an hour to assemble the bike. The Ritallo brakes do not have very good stopping power when they are wet. The Ritallo bike is a bit heavy and I have to use more energy going up hills. After just a couple of months, I started hearing a clicking noise in the gears of my bike. I took them apart, re-greased them, and re-assembled the bike. The sound went away. The Ritallo is not easy to maintain.

APPENDIX 3: Ad_{cc} STIMULUS

Designed to fit everyone's riding needs, **Ritallo** M305 includes a variety of models and sizes for both men and women, including lightweight frame options. A versatile, upright riding position provides optimal comfort for going the distance on the bike path. The Bicycle Club of Philadelphia recently found that Ritallo:

- Has a unique design, making Ritallo easier to assemble than Brizo
- Has a 6061 Aluminum Frame, making Ritallo lighter than Brizo
- Ritallo Comfort-Tuned saddle and easy gearing provides a more comfortable riding experience than Brizo
- With Flex Form and IsoZone technology, Ritallo is easier to maintain than Brizo

1-800.282.8801
www.ritallo.com

Ritallo®

APPENDIX 4: Ad_{nc} STIMULUS

Designed to fit everyone's riding needs, **Ritallo** M305 includes a variety of models and sizes for both men and women, including lightweight frame options. A versatile, upright riding position provides optimal comfort for going the distance on the bike path. Ritallo also has:

- ✿ A unique design for easy assembly
- ✿ A 6061 Aluminum Frame for lighter weight
- ✿ Ritallo Comfort-Tuned saddle and easy gearing for a pleasurable riding experience
- ✿ Ritallo Flex Form and IsoZone technology for easy maintenance

1-800.282.8801
www.ritallo.com

Ritallo®

APPENDIX 5: NWOM_{ca} STIMULUS



HAIR AND BEAUTY PRODUCTS

Offers at Body4Real

FREE PRODUCT SAMPLES WITH ALL ORDERS

FREE SHIPPING WITH \$60 + ORDERS (US ONLY)

MY LOCKER | MY BAG (0) | LOGIN

REGISTER TO RECEIVE SPECIAL PROMOTIONS

NEWS & GIFT OFFERS [JOIN](#)

FACIAL | ANTI-AGING | ACNE | BODY&HAIR | NUTRITION | KITS | [f](#) [t](#)

Solex Deodorant



A clear deodorant stick, with Mountain Spring fragrance, this stick will keep you feeling fresh all day long.

2.5 oz /75g - \$11.00

Qty

[ADD TO BAG](#)

[LIVE CHAT](#)

REVIEWS | BENEFITS | DIRECTIONS | FAQs | INGREDIENTS

★☆☆☆☆

By BM from Jacksonville, FL on 02/07/2012

With Solex, I feel dry and fresh at work. But I feel embarrassed about my body odor after I work out at the gym. I have used Louison deodorant for two years and with Louison, I'm happy to meet up with my friends after the gym.

Since I sweat a lot, I don't feel very confident if only apply Solex once in the morning. I feel more confident about myself as I wear Louison.

I feel bad when I wear Solex since the girls at my school don't like the smell. Well, girls love my Louison smell, which is really cool and makes me totally happy with Louison.

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APPENDIX 6: NWOM_{na} STIMULUS



HAIR AND BEAUTY PRODUCTS

Offers at Body4Real

FREE PRODUCT SAMPLES WITH ALL ORDERS

FREE SHIPPING WITH \$60 + ORDERS (US ONLY)

MY LOCKER | MY BAG (0) | LOGIN

REGISTER TO RECEIVE SPECIAL PROMOTIONS

NEWS & GIFT OFFERS [JOIN](#)

[FACIAL](#) | [ANTI-AGING](#) | [ACNE](#) | [BODY&HAIR](#) | [NUTRITION](#) | [KITS](#) | [f](#) [t](#)

Solex Deodorant



A clear deodorant stick, with Mountain Spring fragrance, this stick will keep you feeling fresh all day long.

2.5 oz / 75g - \$11.00

Qty

[ADD TO BAG](#)

 [LIVE CHAT](#)

[REVIEWS](#) | [BENEFITS](#) | [DIRECTIONS](#) | [FAQs](#) | [INGREDIENTS](#)

★☆☆☆☆

By BM from Jacksonville, FL on 02/07/2012

With Solex, I feel dry and fresh at work. But I feel embarrassed about my body odor after I work out at the gym, even though nobody has ever said anything to me about it.

Since I sweat a lot, I don't feel very confident if only apply Solex once in the morning.

I feel bad when I wear Solex since the girls at my school don't like the smell. Well, maybe, it really depends on the girls. Over all, I am not happy with Solex.

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APPENDIX 7 : Ad_{ca} STIMULUS

Be the one everyone wants to get a little closer to.



Solex[®]

1-800.389.5629
www.solex.com



APPENDIX 8 : Ad_{na} STIMULUS

Be the one everyone wants to get a little closer to.



Get a little closer with Solex.

Solex®

1-800.389.5629
www.solex.com



APPENDIX 9 : QUESTIONNAIRE

Dear participant,

This study is a survey of consumer responses to brand and product information. We seek your truthful responses. There is no right or wrong answer to the questions. We are only interested in your opinions.

Thank you for your participation in this study!

Imagine that you are going to buy a deodorant. You are seeking some information about deodorants from consumer product reviews on online shopping Websites and advertisements before you make your purchase decision. Solex is a new brand. Louison is a leading brand in the deodorant marketplace.

On the next page, you are going to read a consumer review of Solex. Please pay attention to the information in the consumer review before responding to the questions that follow.

SECTION 1: Please answer the following questions about the consumer review of Solex you just read. Please circle the number that corresponds to your response:

1. Please rate how negative/positive the consumer review about the Solex is

<i>Very negati ve</i>	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	<i>Very positi ve</i>
-------------------------------	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	-------------------------------

2. Do you agree or disagree with the following statement?

The consumer review compares Solex with Louison. (circle one) Yes No

3. Please provide your opinion regarding the statements below:

	Not at all	Very much
Did the consumer review make you think of real differences between Solex and Louison?	1 2 3 4 5 6 7	
Did the consumer review make you think of reasons for Solex's superiority?	1 2 3 4 5 6 7	
Did the consumer review make you think of the pros and cons of Solex?	1 2 3 4 5 6 7	
Did the consumer review make you "think" rather than "feel"?	1 2 3 4 5 6 7	
Did the consumer review make you think of arguments for using or not using Solex?	1 2 3 4 5 6 7	

Once you are finished reviewing the consumer review of a deodorant and answering the following questions, continue on to the next page.

Please do not turn back.

On the next page, you will see an advertisement for a deodorant. Please pay attention to the information in the advertisement before responding to the questions that follow.

SECTION 2: Please answer the following questions about the advertisement you just saw. Please circle the number that corresponds to your response:

4. What is your overall evaluation of the Solex?

<i>Dislike</i>	1	2	3	4	5	6	7	<i>Like</i>
<i>Negative</i>	1	2	3	4	5	6	7	<i>Positive</i>
<i>Useless</i>	1	2	3	4	5	6	7	<i>Useful</i>
<i>Unfavorable</i>	1	2	3	4	5	6	7	<i>Favorable</i>

5. Do you agree or disagree with the following statement?

The advertisement compares Solex with Louison. (circle one) Yes No

6. Please provide your opinion regarding the statements below:

	Not at all						Very much
Did the ad make you think of real differences between Solex and Louison?	1	2	3	4	5	6	7
Did the ad make you think of reasons for Solex's superiority?	1	2	3	4	5	6	7
Did the ad make you think of the pros and cons of Solex?	1	2	3	4	5	6	7
Did the ad make you "think" rather than "feel"?	1	2	3	4	5	6	7
Did the ad make you think of arguments for using or not using Solex?	1	2	3	4	5	6	7
Did the ad make you think of real differences between Solex and Louison?	1	2	3	4	5	6	7

7. Please provide your opinion regarding the statements below:

	Not at all						Very much
When I buy a product online, I always read reviews that are presented on the website.	1	2	3	4	5	6	7
When I buy a product online, the reviews presented on the website are helpful for my decision-making.	1	2	3	4	5	6	7
When I buy a product online, the reviews presented on the website make me confident in purchasing the product.	1	2	3	4	5	6	7

8. Please tell your opinion about advertising in general:

	Strongly disagree Strongly agree						
Overall, I consider advertising a good thing.	1	2	3	4	5	6	7
My general opinion of advertising is unfavorable.	1	2	3	4	5	6	7
Overall, I like advertising.	1	2	3	4	5	6	7

9. Please list the thoughts you have toward the product depicted in the ad you just saw:

10. What is your gender? (circle one) Male Female

11. What is your age? _____

12. Last four digits of your student ID: _____

THIS CONCLUDES THE STUDY. THANK YOU FOR YOUR PARTICIPATION!

Vita

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